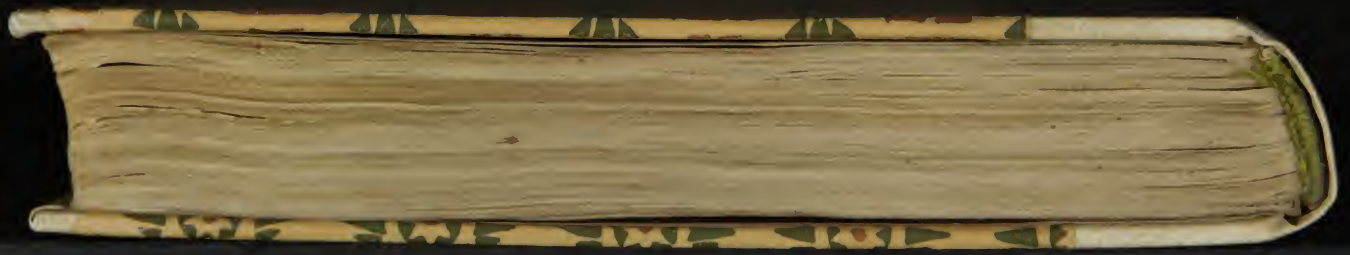


Tabule Directionum

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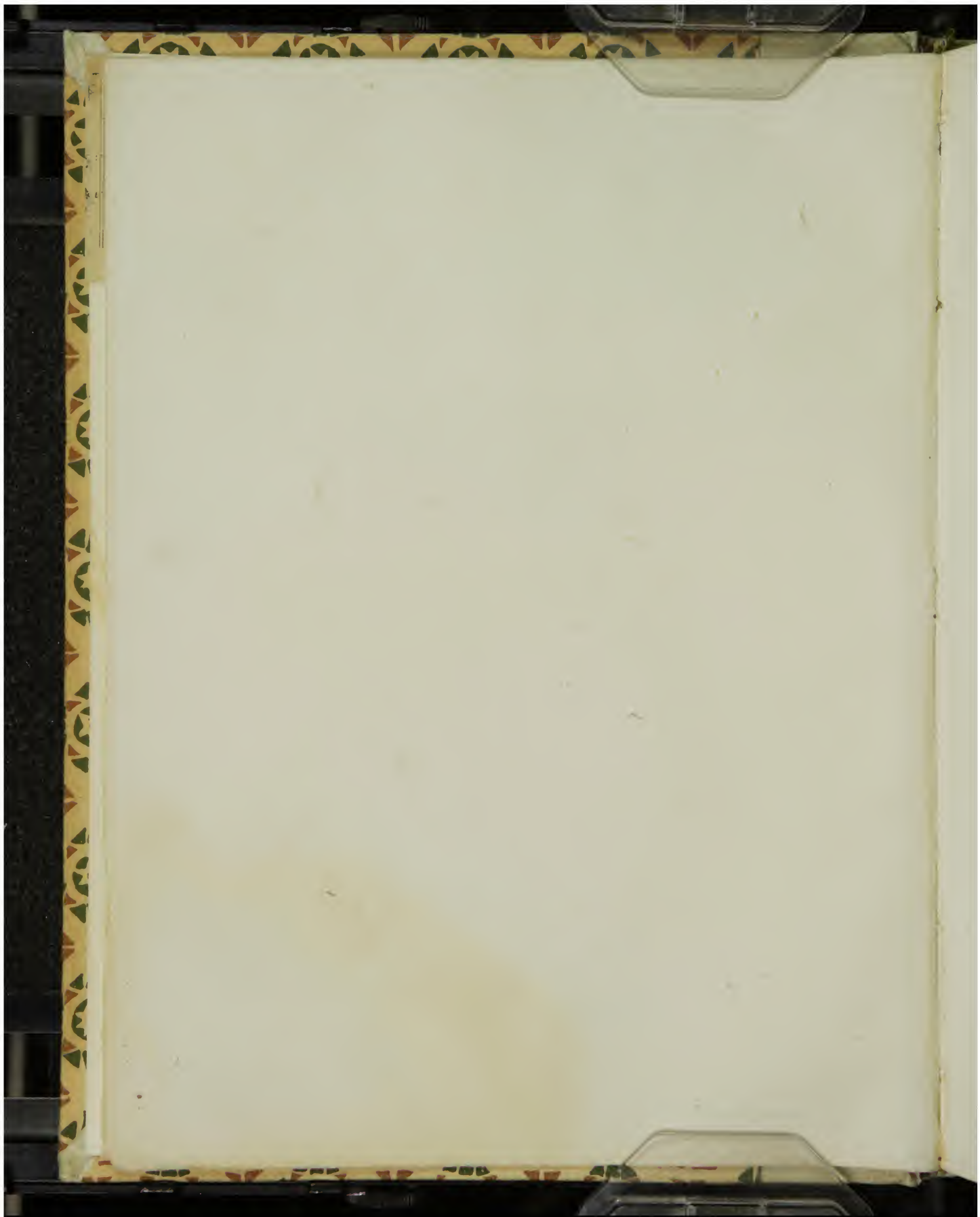
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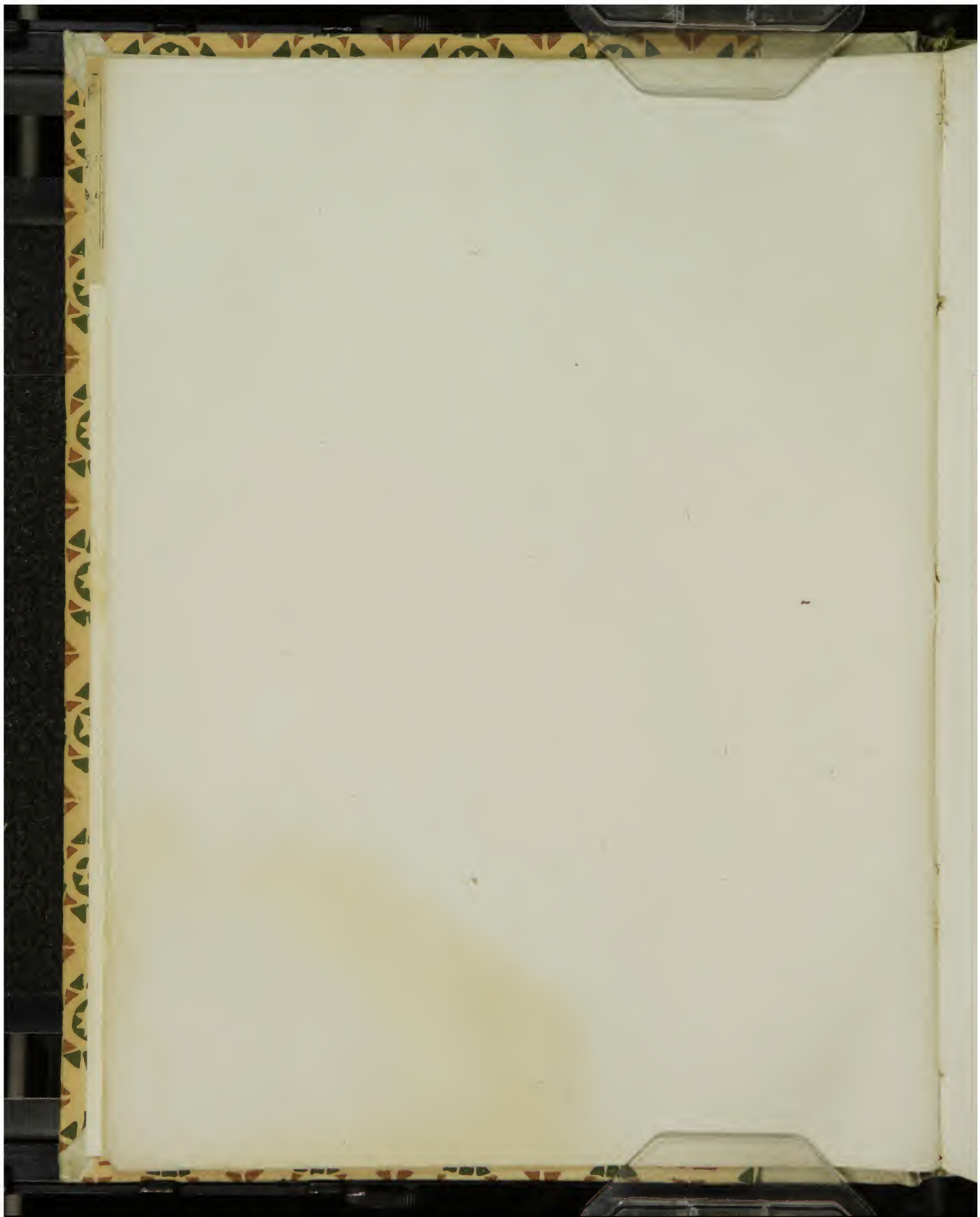
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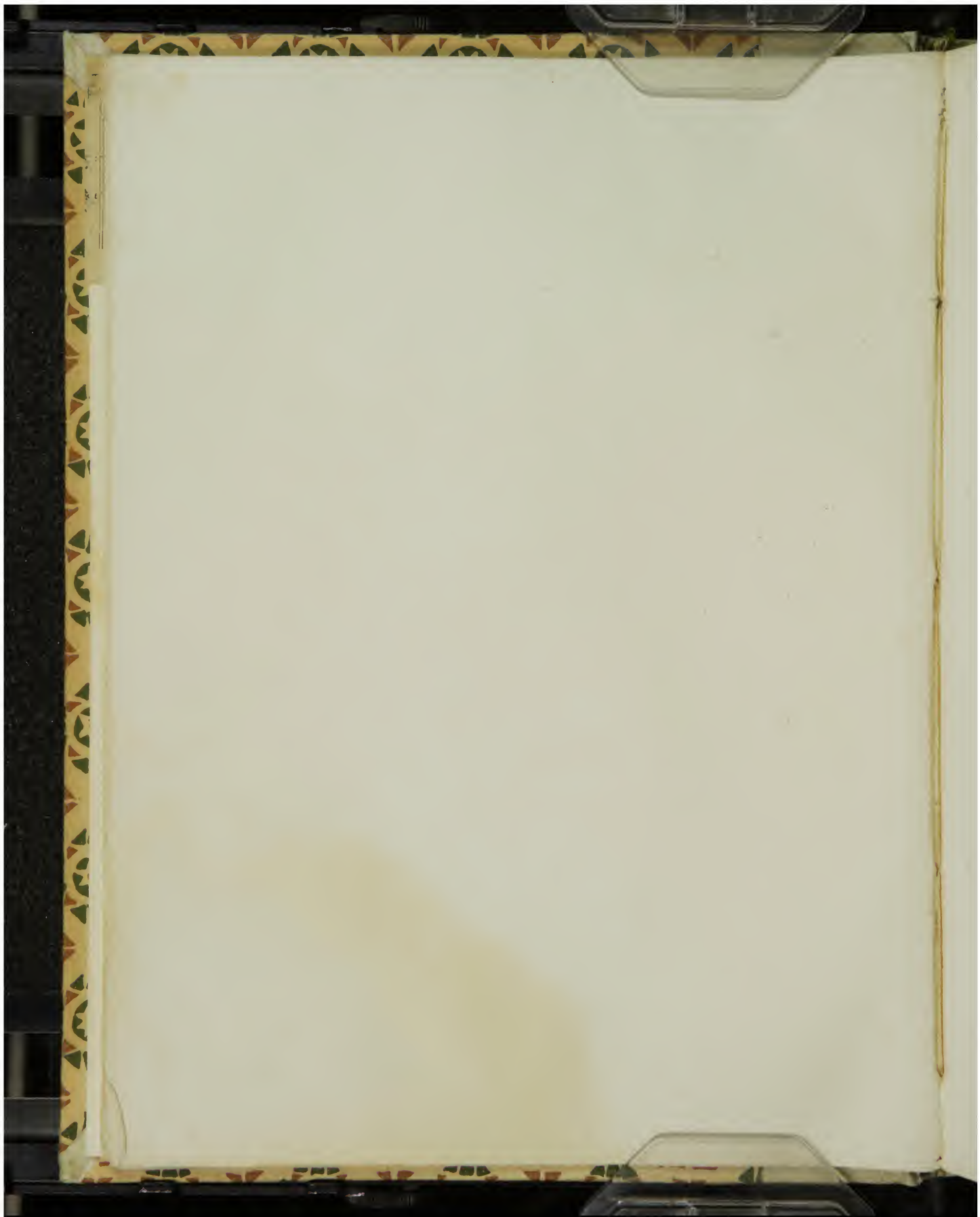






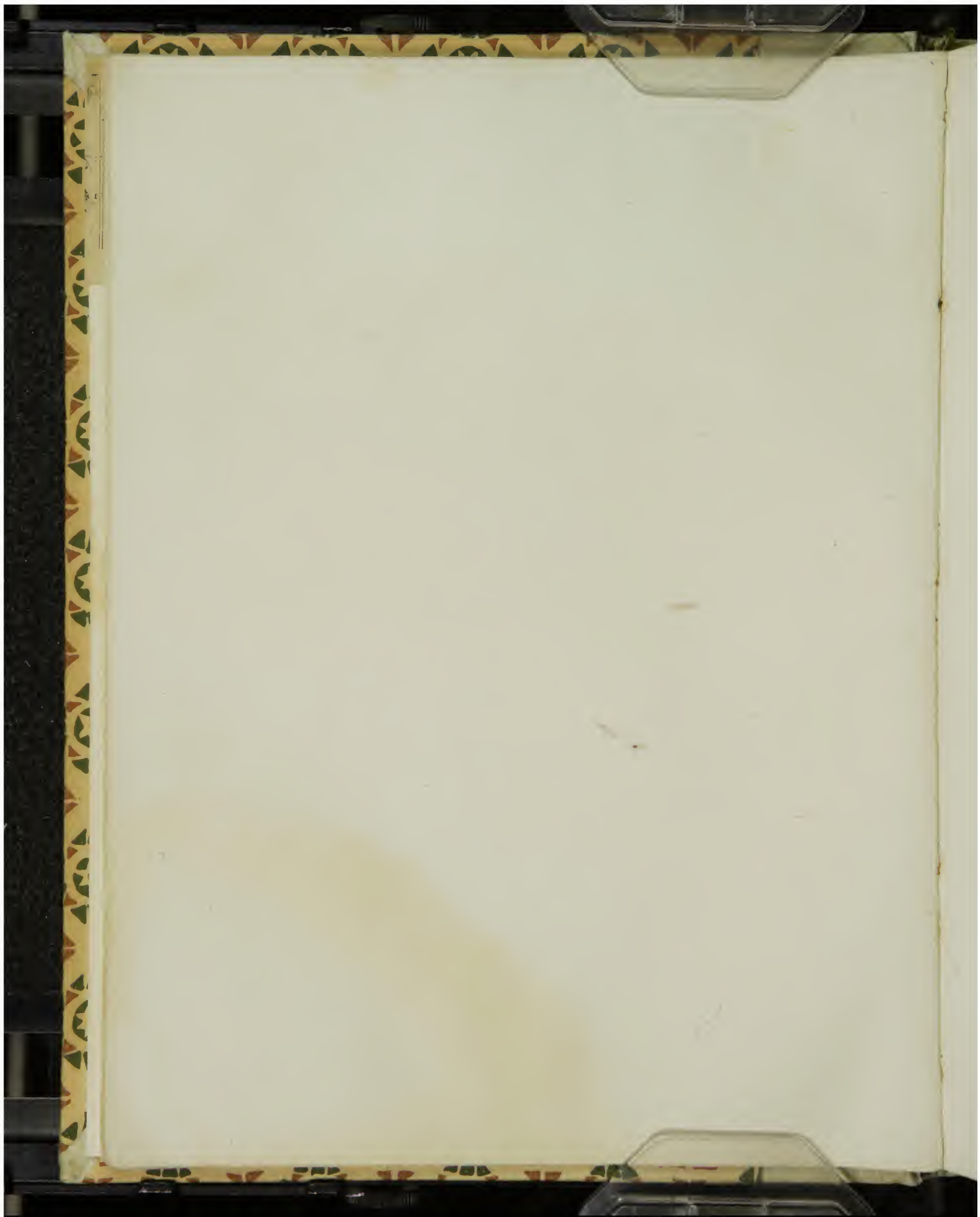






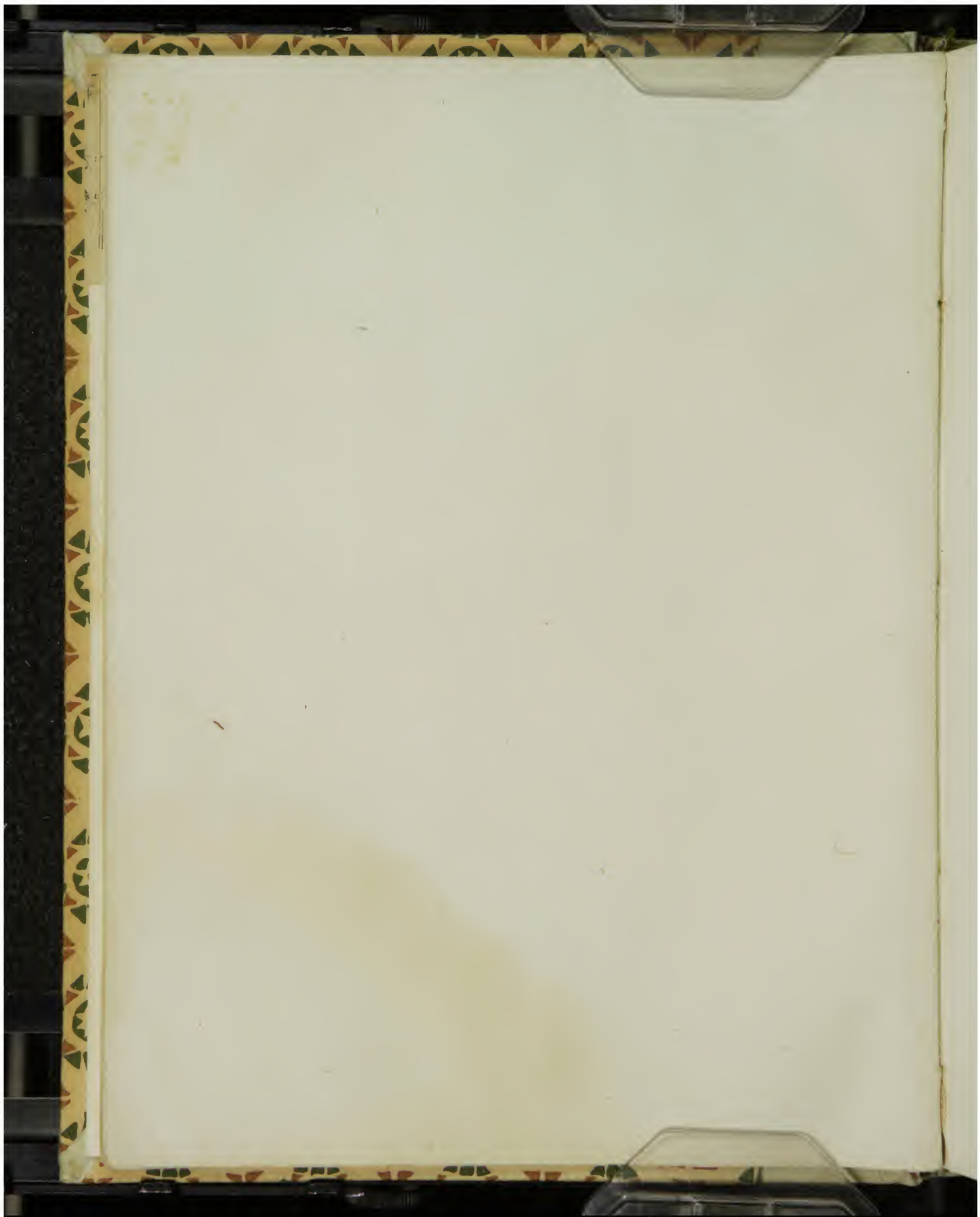




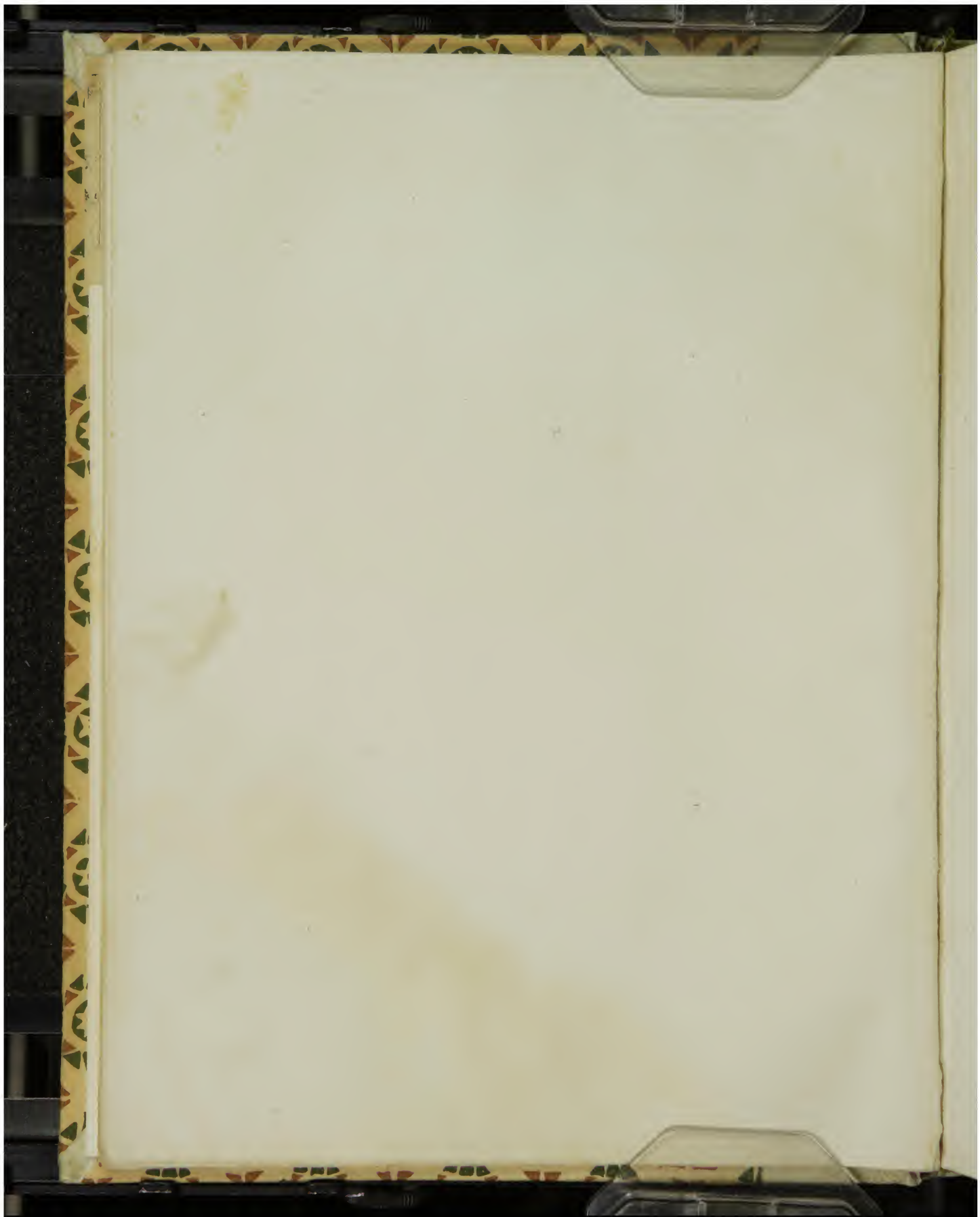






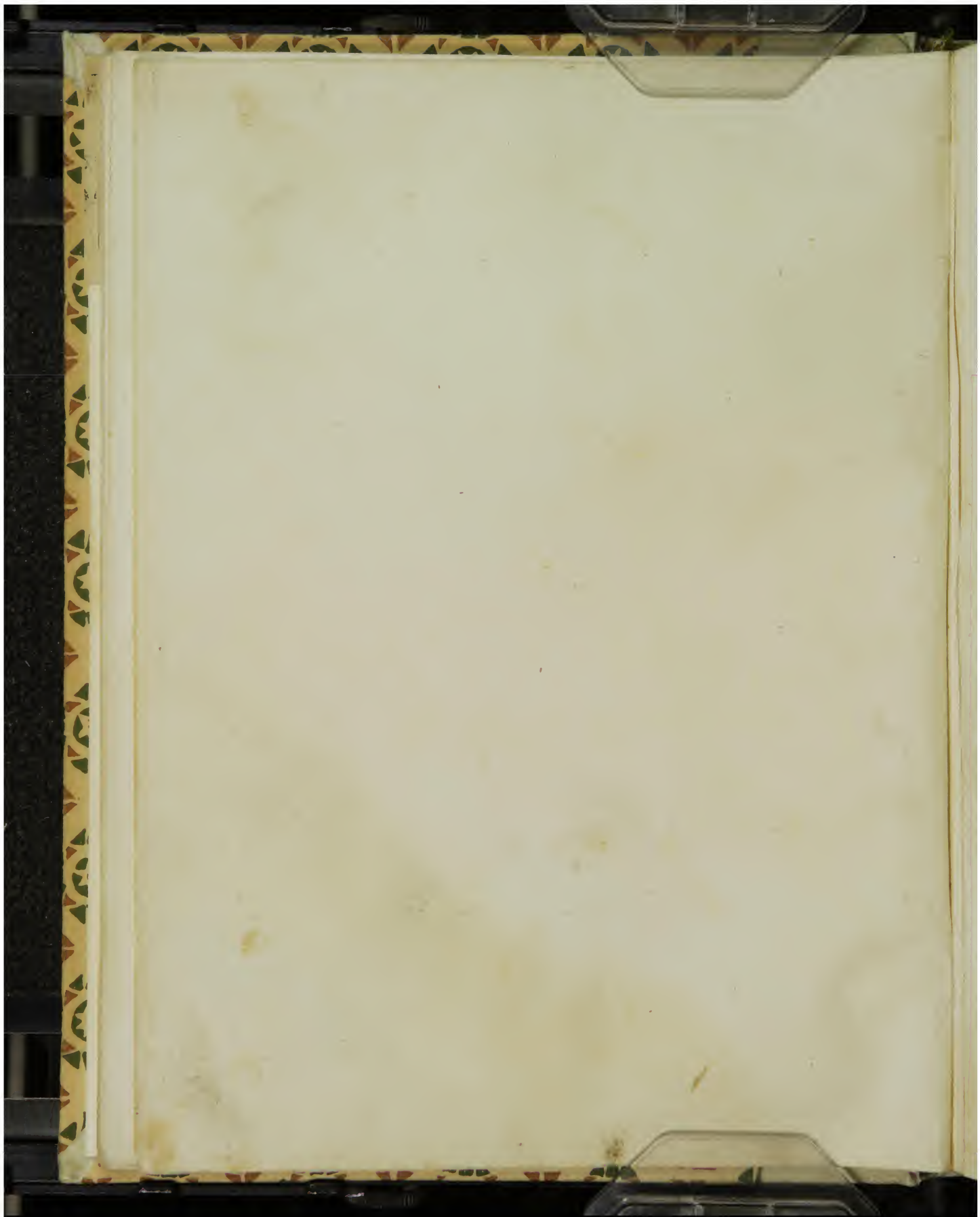












# Tabule Directionū

profectionūq; famosissimi viri Magistri Joannis  
Germani de Regio monte in Natiuitatibus  
multum vtilis: Una cum Tabella si-  
nus recti. Nuperrime emenda-  
te et complete q̃ luculen-  
tissime impressæ.

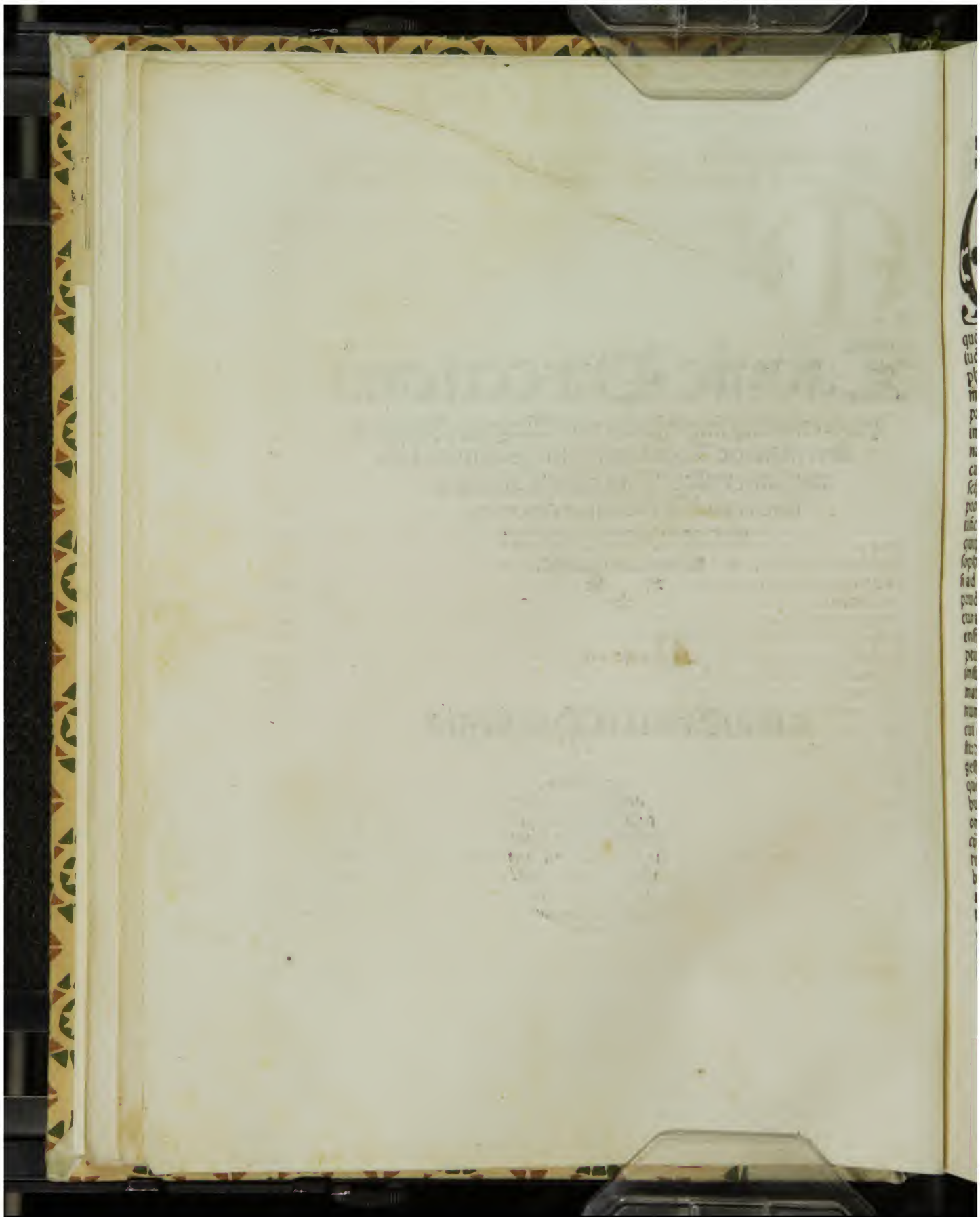
\* \* \*

*Antony*

Cum Gratia et Privilegio.









Reuerendissimo in Christo patri et dño: dño Joanni archiepiscopo Strigoniensi legato etc. Joannes Germanus de regionote se humiliter commendat.



Quidnam esse admodum et fuisse semper in edendis libris difficultatem mihi videri solet: dñ reuoluo maioru nostrorum exemplaria: ac presertim eor exordia conspicio: vbi pleriq̃ tenuitate ingenioꝝ suorum insimulant non suffectura videlicet cepto operi. Alij vero arduitate tentati negocij pene deterreri vident nonnulli erratis suis venia datum iri volut dubia scribendi fortuna haud iniuria suspicantes. Adhuc autem reuerendissime dñe: aliud preterea accedit quod factu prorsus impossibile reor: assidue scilicet iussioni tue morem gerere ac demum iudicio tuo non minus acuto q̃ recto dignu aliquid reddere. Tue profecto monitioni nephas est contravenire: qui enim licentius in me habeat imperium preter te mortalis nemo est. Tibi autem lucubrationes meas coram te tam rigido: q̃ perspicacissimo cerebro deprompsero: labefect illico annus. Quis. n. eruditissimus licet aliquid nouarum litterarum impune tibi afferet quippe qui omni doctrina ac virtute miru in modu peditus es diuinarum humanarumq̃ rerum plena tenes cognitionem: omnibus cuiuscunq̃ litterature cum te prebeas auditor: oēs tamen excellentissima eruditione tua antecellis a deo: vt discipulos sese fateantur quicunq̃ in habitu preceptoru ad te accesserint. Quantus es q̃ profundus in sacris exstas litteris: nemine ignorare arbitror. Quid referam de iure pontificio: cuius noticia qdem ornamento tibi est. Tisus autem dignitati tue pernecessarius quippe qui supra omnes prelatos regni hungarie primatu tenes: vniuersa demum philosophia tibi familiaris est: discipline aut quadruiuales decus et gloria pepererunt. Quod si ad negocia humana transeundi detur licentia: quis non admirabit immensam tuam prudentiam: ex qua totius regni hungarie gubernatio penderet. Ita tamen fors publica curas vt domi quoq̃ magnificentia tua ineffabilis demonstraretur in arce in qua strigoniensi ad cuius restitutione assiduam: etsi nullis parcas impensis: longe tamen ampliori sumptu solertioꝝ studio bibliothecas preciosissimas ac omni genere codicu refertissimas instituisti. Quanta preterea et q̃ perhennē curam habeas condendi studij generalis cōclamatum esse tam pridē arbitror: cum ex vniuersis litteratorum consortijs oium professionum doctissimos quosq̃ viros accersere soleas: officio fretus regij cancellarij supremi: cui cepto felicissimo: me quoq̃ Cluicēnsis collegij alumnū quantumcūq̃ adesse voluisti: docturum videlicet quadruiuales facultates. Tenienti igitur voluntatiq̃ tue more gesturo mihi in primis id mandati dedisti vt tabulas quasdam directionu componerem que et vsu faciles et iudicibus vtilēs essent. Recte quidem animaduertisti difficultatem huiusce rei: quam profecto omnes astrologi tanq̃ horrendum scopolum declinat. nemo omnium est qui sese tantis rhetibus satis expedire possit. tam etsi multifaria huius negocij precepta passim reperiantur. Multum nempē in quarto libro suo artem directionu asserit esse complementum iudicij natalis. quāobrem opere precium decreuit compilare tabulas soluendi nodos que cum nostra tempestate nusq̃ reperientur. Darmensis qdam archidiaconus auctorem secutus: tales contexit ad medium sexti climatis: imbecilles tamen ac a mente Ptolomei eiusq̃ comentatoris: ymo et ab opinione propria (quod ferissimu ē) longe alienas. Nam et ipse modum dirigendi per speram solidam officio semicirculi meridiano et orizonti cocuntis sumopere laudat et ptolemonem idem (quod verum est) sensisse arbitrat. postremo tamē in tabulis suis ponit fiduciam: ignoras utiq̃



quantum his duobus modis interesse possit discrimine: quod reuera .s. gradus (absur-  
dum dictu) nonnunquam excedit. Erit forsitan qui ptolomeum clarissimum eiusdem quoque  
vici in simulabit quippe qui in tertio quadripartiti sui agens de spacio vite: paulo antequam  
ad duos dirigendi modos descendit: totius artis iacit fundamentum. necessarium qui-  
dem ratus in directione sequentis loci positionem similem fieri positioni antecedentis. id  
autem nequaquam accideret: nisi locus sequens traducatur ad semicirculum in quo statue-  
batur locus antecedens quod et illi expositore eius confirmat. Verum duo modi eius cum  
exemplis a computatione directoria qua memoratus parmensis ac pene omnes alij uti-  
non discrepat. Quid igitur de tam prudenti quam eruditissimo viro sentiemus. Nunquid  
tantum philosophum repugnantes asseruisse sententias impune suspicabimur. Credo eg-  
dem ptolomeum et serio tradidisse fundamentum artis per semicirculos huiusmodi et mo-  
dum numerandi apprimè calluisse: quavis difficilem adeo ut perplexum potius redde-  
ret auditorem quam doctum. Satiùs ergo putans prope verum versari quam veritatem ipsam ra-  
dicitus querendo desperare supputationes quasdam breues veritati propinquas expo-  
suit. Quod haudquaquam mirum videri debet cum et nostra etate ragusinus ille iohannes  
gasulus tamen ptolomei eruditissimi Sebuzque accuratissimi ac aliorum plurimorum doctri-  
nas acceperit: nullam tamen proorsus numerandi facilitatem in directionibus ac equan-  
dis domibus aduexit. quinymo turbam maximam multitudinem argumentationum conci-  
tauit. Quantum itaque difficultatis in hoc existit negotio: satis liquet. Quid autem com-  
modi naucissemur si generalis quedam artis directorie promptitudo nobis illata fue-  
rit: ex libris iudicium abunde colligetur ubi tempora futurorum accidentium omnium per di-  
rectiones potissimum inuestigari solent. Tantam igitur utilitatem presul dignissime dire-  
ctionum tabule afferrent quas petebas in quacunque regione latitudinem. 60. graduum  
non excedente: siue significator dirigendus in itinere solari existat: siue ab eo versus alte-  
ram polorum secedat: in quibus maximam solis ab equatore suppositi declinationem trium  
et viginti graduum cum dimidio observationibus modernis maiorem non admittentibus.  
In omni demum regione duodecim celi domicilia constituere ac in eis stellas distribue-  
re aliaque plurima scitu iocundissima per hasce tabulas addiscere licebit. Eas itaque pri-  
mitias operum meorum suscipere digneris quas ubi pro acumine ingenij tui probaue-  
ris in publicum prodire iubeto. Vale presulum decus.



# Optimum Problema.



Declinationē planete locuz habētis cognitū breuiter inuenire. Quere signū  
 ⁊ gradū loci planete in latere dextro tabule declinationū si fuerit in me-  
 dietate zodiaci ascendente vel in sinistro si in medietate descendenti extite-  
 rit. latitudinē autem si quam habet in latere superiori transuerso ⁊ in angu-  
 lo cōmuni offendes declinationē planete quesitā septentrionalem quidem  
 si supra scalam rubram meridiana aut si infra eam reperta fuerit. Quod  
 si longitudo planete vel latitudo eius aut utraq; non fuerit expressa in lateribus tabu-  
 le: agendū est duplici introitu vt assolet hoc pacto. Intrabis primo cum lōgitudine ⁊ la-  
 titudine proximo minoribus ⁊ angulum cōmunem extra notabis: eum deniq; angulum  
 cōmunem conferas ad numerū immediate sequentem inferiorem videlicet si longitudo  
 planete in latere sinistro tabule accepta fuerit: aut superiorem si in latere dextro ⁊ de dif-  
 ferentia horum numerorū accipies partem proportionale sūm proportionem minorū: u;  
 iuxta gradus integros longitudinis existentūz ad .60. minuta: addendam quidē angu-  
 lo cōi si numerus sequēs ipsi angulo cōi maior fuerit: minuendam aut si minor: quā par-  
 tē pportionalē seruabis seorsuz cū nota additiōis vel minutiōis ut res ipsa postulat. De  
 de piformiter cōferes angulū cōm memoratū ad numerū ei collateralē versus sinistra  
 quidem si latitudo septentrionalis fuerit: versus dextram autē si meridiana: ⁊ de differē-  
 tia anguli cōmunis numeri collateralis accipies partem proportionalem scdm propor-  
 tionēz minorū latitudinis ad .60. addendā itē vt prius si numerus collateralis angulo  
 cōmuni maior fuerit: minuendā vero si minor: has itaq; duas partes proportionales cō-  
 iunges: si vel ambe fuerint addende vel ambe minuende: congeriemq; earū augulo cō-  
 muni adiectes si addende fuerint: aut ab eo demes si minuende extiterint: collectus enim  
 numerus aut relictus declinationē quesitam manifestabit. Si vero altera quide; memo-  
 ratarum partiū proportionalium addenda fuerint: altera autem minuēda: fuerintq; ip-  
 se quales: angulus cōmunis intactus pro declinatione planete habebitur. Si aut ineq-  
 uales extiterint: differentia earum addeat angulo cōmuni si maior pars proportionalis  
 addenda erat: aut minuetur ex eo si maior minuēda fuerat ⁊ quod colligetur hoc pacto  
 vel relinquetur declinationem planete computabit: septentrionalem quidem vt prius si  
 supra scalam rubram steterit angulus cōmunis meridiana aut si infra. Contingit  
 autem nōnunq; scalam rubram intercipere angulum cōmunem ⁊ numerūz immediate  
 sequentem tunc itaq; angulus cōmunis iungendus est numero imediate sequenti: ⁊ cu;  
 aggregato agendum est pro parte proportionali elicienda vt iam pridem cum differētia  
 anguli cōmunis numeri; sequentis. Tertiū si postremo non posset fieri subtractio ab an-  
 gulo cōmuni fiat e contra subtrahendo videlicet angulum cōmunem ab ipsa parte pro-  
 portionali ⁊ relinquetur declinatio quesita: alterius tamen denominationis q̄ erat an-  
 gulus cōmunis. Et si planeta nullam habuerit latitudinē intrabimus p̄fata tabulam.  
 Cuz vero loco planete ⁊ ex directo eius in columnula media supra quā nullus scribitur  
 numerus latitudinis habebimus declinationem quesitam. Similiter agemus planeta  
 latitudinem habente in minutis dumtaxat: hoc vno tamen adiecto q; declinatio in an-  
 gulo cōmuni occurrens conferatur ad numerū ei collateralē: sinistrum quidem si lati-  
 tudo septentrionalis fuerit. dextrum aut si meridiana ⁊ de differentia numerorū accipia-  
 tur pars proportionalis quemadmodū superius monitum est. Quāuis autem de plane-  
 tis solum hucusq; sermo sit habitus: potest tamen hec tabula stellis etiam fixis accom-  
 dari illis videlicet que latitudinem .8. graduū ab itinere solari haud quāq; egrediunt.

scala.



**I**n exemplo facilius forsitan accipies: habeat planeta quispiam gradus. 12. minuta. 16. virginis cum latitudine septentrionali graduū. 3. et minutoz. 24. Investigaturus igitur declinationem eius ab equatore video gradus. 12. virginis in latere sinistro tabule. 3. aut gradus latitudinis septentrionalis in fronte eiusdem tabule: sub quibus descendo usque aduersus 12. gradus virginis: ubi offendo numerū anguli cōis et graduū. 9. minutoz. 51. cuius quidem anguli cōis et numeri immediate subsequētis oria est. 23. minuta de quibus accipio partē proportionale secundum proportionē minutoz. 15. longitudinis ad. 60. quarū scilicet partē que est fere. 6. minuta. Nec autem pars proportionalis minuenda est quia numerus subsequens angulū cōi minorem minores eo fuerit. Similiter conféro angulum cōem ad numerū et collateralem versus sinistram quā latitudo planete septentrionalis subiecta est: et de differētia que est. 55. minuta accipio partem proportionale secundum proportionem. 24. minutoz latitudinis ad. 60. illa pars proportionalis est. 22. minuta addenda videlicet quia numerus collateralis angulo cōmuni maior occurrit. Dempta itaque parte proportionali longitudinis ex parte proportionali latitudinis manet minuta. 16. que adiungo angulo cōmuni et tandem inuenio declinationē planete septentrionalē. 10. graduū et 7. minutoz. Reliquas autē varietates operationū cum et faciles sint et ex iam nunc memoratis edici possunt ingenio tuo relinquendas censuimus ne dicacitati potius quam vilitati studuisse videamur.


**Secundum Problema.**

**Q**uilibet stelle vel planete fixe declinationē generaliter computare ex precedenti didicimus. quo pacto cuiusvis stelle latitudinē. 8. graduū non egredientis declinatio investigatur. Cum autem plurimę stelle fixe multo latius euagetur. quarum influxus tum propter corporū magnitudinem: tum propter eaz ad alias siue fixas siue erraticas colligantia vel cōmixtionem summo opere animaduertendus est si quidem stelle fixe (ptolomei testimonio) dant dona grandia. quibus sepe numero infauste finiant. decreuimus generalem declinationū computationem tradere quo cautius atque abundius genituras iudicaturi accidentia futura preuidere possint. Intra bis igitur tabulā declinationis generalem cū longitudine stelle accipiēdo videlicet gradus longitudinis in latere tabule sinistro. si nomen signi in fronte tabule repertus fuerit: in latere autem dextro. si in calce tabule nomen signi offenderis. et numerū ex directo eius gradus occurrentē: (qui inscribitur arcus) seorsum notabis cū denominatione sua septentrionali videlicet si signū longitudinis stelle fuerit septentrionale: meridia autem si meridianum. Est autē arcus huiusmodi portio circuli latitudinis per stellam incedentis inter equatōrē et iter solare comprehensus: notabis et numerum multiplicandū gradui stelle obiectum: deinde latitudinē stelle iunges arcui seruatō si eandem cum ipso arcu denominationem habuerit: eritque aggregatū eiusdem denominationis cū ambobus: aut alterū ex altero demē. latitudinem scilicet ex arcu memorato. aut arcum ipsū ex latitudine. si diuersum fuerint denominationū: residuū autem eam sortietur denominationem. quā habebat idā quo facta ē subtractio. Tale itaque aggregatū. vel residuū si quid fuerit erit arcus circuli latitudinis stelle inter equatōrē et verum locū stelle contentus. Nam si nullū esset huiusmodi residuū: quod accidit dū latitudo stelle et arcus circuli latitudinis inter equatōrē et eclipticā equales quidem sed diuersarum existunt denominationū nullā propterea ab equatore declinationem stellā ipsa pateretur: per sinum igitur rectū arcus idā nunc memorati multiplicabis numerum multiplicandū superius seruatum. et productū quicquid primas figuras versus dextram reicies. vnitatis relictis adiuncta: si reiecte figure plus. 50000. denotauerint. Ille enim pacto sinum rectum declinationis stelle cognosces: cuius



*exemplo*  
 arcum tabula sinus *exemplo* suscitabit: qui quidem arcus erit de clinatio stelle que sita  
 eandemq; sortietur denominationem, quam habebat supra dictam aggregatum vel resi-  
 duum. Quod autem paulo remissius precepisse videamur si quando iuxta gradus loci stel-  
 le minuta quepiam iacuerint prohibentia introitu tabule ad integros gradus facit: hoc  
 vnum generaliter iubemus agendum esse duplici introitu ubi opus fuerit, quemadmo-  
 dum in precedenti monuimus, ac in alijs tabularum operibus fieri solet: q; qui non pri-  
 us didicerit, q; hasce aggreditur tabulas ineptus doctrine nostre, censetur auditor. **¶** Ad  
 proposito nostro breue accomodabitur exemplum. Stella queuis in fine sit. 12. graduum  
 virginis habens latitudinem borealem trium graduu. Computaturo igitur mihi decli-  
 nationem eius occurrit nomen signi in calce tabule: quamobrem accipio duodecim gra-  
 dus in latere dextro tabule, in quorum versu supra nome signi offendo arcum septentrio-  
 nalem septem graduum et 39. minutorum numerumq; multiplicandū. 92528. arcui iam  
 dicto addo. 3. gradus latitudinis stelle resultat arcus. 10. graduum et 39. minutorum, cuius  
 sinum rectum scilicet. 11089. duco in. 92528. producuntur. 1026042992. a quibus reijcio  
 primas quinque figuras versus dextram, et relinquuntur. 10260. sinus scilicet rectus decli-  
 nationis quesite, cuius arcum tabula sinus supponens semidiametrum circuli. 60000.  
 particularum reddit. 9. graduum et 51. minutorum.

### ¶ Tertium Problema.

uiuscunq; planete ascensionem rectam faciliter numerare. Intra tabulam celi  
 mediationis cum vero loco planete ac latitudine eius, si quam habet, et in an-  
 gulo comuni videbis ascensionem rectam ab initio arietis computandam. Si  
 tamen longitudinem planete vel latitudinem eius, aut vtranq; non inueneris  
 precise in lateribus tabule, ingredere cum numeris proximo minoribus, et numerum an-  
 guli comuni seorsum nota. Deinde subtrahere dictum numerum anguli comuni, a nu-  
 mero immediate ei subiecto accomodatis. 360. gradibus si opus fuerit, et de differentia  
 eorum accipe partem proportionalem secundum proportionem minuto: et que sunt iuxta gra-  
 dus longitudinis ad. 60. minuta: huiusmodi autem pars proportionalis Temper est ad-  
 denda in hoc negotio. scribe ergo eam seorsum cum nota additionis. similiter compara  
 angulum comuni ad numerum dextro lateri eius, vel sinistro, vti processus latitudinis  
 erigit adiacentem, et minorem eorum deimpro ex maiore: de differentia accipio partem pro-  
 portionalem secundum proportionem minutorum et iuxta gradus latitudinis existentium ad. 60.  
 minuta que pars proportionalis: addenda quidem erit, quando numerus collateralis  
 angulo comuni maior existit: minuenda vero quando minor. Si itaq; ambę partes pro-  
 portionales addende fuerint collige eas, et congeriem angulo comuni adicias. Si autem  
 ambę minuende aggregatę earum ex angulo comuni minuas. Quod si altera quideę earum  
 addenda fuerit: altera autem minuenda, differentiam earum adde angulo comuni, si ma-  
 ior pars proportionalis fuerit addenda: aut minue si maior minuenda fuit. Quod enim  
 hac lege vel colligetur vel residuabitur ascensionem planete rectam numerabit. In hu-  
 iusmodi autem operatione nonnunq; colliguntur plures q; 360. gradus tunc itaq; 360.  
 abiciendi sunt et residuum pro ascensione recta tenendum. Stelle autem latitudine peni-  
 tus carentis ascensionem rectam inuenies vel in columnula media cui figura. o. supra scri-  
 bitur vel per tabulam ascensionum rectarum quemadmodum cõter fieri solet. **¶** cetera  
 contemplandū est q; in principio tabule sub latitudine septentriõali et in fine eiusdẽ sub lati-  
 tudine meridiana contingit aliquãdo, numerum anguli cõis esse maiorem. 356. gradibus et

¶ A iij



numerum collateralem dextrum in qua vel finistrum minorem. 4. gradibus antecōtra  
tunc itaq; minori earum adiungendus est totus circulus. 360. graduū: & aggregato utē/  
dum est ac si fuisset repertus in tabula p pte proportionali ac ceteris opib; absoluendis.  
Quicquid autem hactenus de planetis precepimus de stellis quoq; fixis accipiendum  
est latitudinem. 8. graduum nequaquā exilientibus. C In exemplo repetatur stella qua  
vsi sumus in primo problemate ex directo. 12. graduum sub latitudine trium graduū; se/  
ptentrionali inuenio gradus. 164. minuta. 34. cuius numeri & proximo subsequētis dif/  
ferentia est. 56. minuta de qua differentia accipio partem proportionale scdm proportio/  
nem. 15. minutoz ad. 60. minuta: est autem pars illa proportionalis. 14. minutoz addē/  
da item dictus numerus anguli cōmunitis demptus ex numero collateralis sinistro religt.  
24. minuta quoz pars proportionalis scdm proportionē. 24. minutoz ad. 60. est fere. 10.  
minuta addenda congregatis itaq; huiusmodi partibus pportionalibus & cōgerie eaz  
ad dicta ipsi angulo cōi resultabunt. 164. gradus & 58. minuta: tantā igitur pronuntiabo  
ascensionem rectam stelle propofite.

*Quartum Problemā.*



Ascensionem rectam cuiusvis stelle generaliter inuestigare. Intra tabulam ce/  
li. mediationū generalem cū vero loco longitudinis stelle & arcum equatoris  
ex directo eius repertum seorsum scribe cū numero multiplicando, arcum in/  
quaz qui inscribitur radici ascensionū. Est autē arcus huiusmodi portio equa/  
toris inter principium arietis & circuli latitudinis stelle cōprehensa. Deinde declinatiōe  
stelle ingredi tabellā secundā, & numerum ibidem repertū duc in numerū multipli/  
candum iam pridem seruatiū, productoq; primas quinque figuras versus dextram abi/  
ce, nam residuus numerus solus: aut cum vnitatis si abiectione figurę plus. 50000. significa/  
uerint: erit sinus rectus cuiusdam arcus equatoris intercepti a circulo latitudinis & cir/  
culo declinationis per verū locū stelle transeuntibus: quę itaq; arcū eius per tabulam  
sinus (eum arcū qui a plerisq; vocatur differentia transitus stelle per celi mediū) quę ad  
de radici ascensionū: si verus locus stelle fuerit in medietate ecclypice descendenti, quę  
videlicet a capite cancri incipit & ad initium capricorni per libram incedendo desinit, &  
stella ipsa habuerit declinationem septentrionalē: aut si stella fuerit in medietate ascen/  
denti cū declinatione meridiana. Si fuerit in medietate descendenti cū declinatione me/  
ridiana aut in medietate ascendenti cū septentrionali declinatione minue predictū arcus  
a radice ascensionū: quod enim hoc pacto eneniet vel addendo, vel minuendo, prout res  
ipsa postulat: erit numerus ascensionis rectę computandus in equatore ab initio arietis.  
Qd si non potuerit fieri subtractio differentię transitus per celi mediū ab ipsa radice ascē/  
tionum adiungendus est integer circulus. 360. graduū memorate radici ut ab aggrega/  
to possit fieri subtractio. Si preterea stella nullaz habuerit declinationē: radicem ascen/  
tionū pro ascensione recta stelle tenebis. Hoc demum non est silentio pretereundū qd cū  
quilibet sinus rectus minor sinu quadrantis duos habeat arcus vnum scilicet minorem  
quadrante: alter aut minores eo: tunc quidē accipiendus est arcus minor quadrante quā/  
do arcus circuli latitudinis per stellam transeuntis qui inter equatorem, & verū locū  
stelle cōprehendit minor quadrante circuli existit: tunc aut maior dū ille quadrante supe/  
rabit. Ceterbi grana repetō stellā cui in secundo problemate tribui. 12. gradus virgi/  
ni mediationū generalem cū. 12. gradibus virginis obicitur radix ascensionū habens.  
160. gradus & 29. minuta numerusq; multiplicandus. 24590. huic stelle in secūdo pro.

*Decl. sep. Minue*

*Almedius*

*63. 8. 12. 12*

*Decl. Mer. Adde*

*Decl. sep. Adde*

*Decl. Mer Minue*



bleumate computata est declinatio septentrionalis. 9. graduū 7. 51. minorū quibus median-  
diantib⁹ per tabellam secundā duplici introitu inuenio multiplicatorē. 17363. eu3 duco  
in. 24590. procreant. 426956170. a quibus reicio primas. 5. figuras vice earū tamen addē  
do unitatem relicto numero quin quidē excedunt. 50000. sic habeo. 4270. sinu3 rectum  
diē transitus per celi mediū cuius arcus est. 4. gradus 7. 5. minuta quem adiūgo radici  
ascensionū 7 resultat ascensio recta quesita. 164. graduū 7. 34. minorum.

Quintum Problema.

**E**t ascensione recta cognita arcum ecclipticę sibi coascendentē indagare. Que-  
re numerum ascensionis rectę in corpore tabulę ascensionum rectarū 7 ex di-  
recto eius in fronte quidem signi zodiaci. in latere autem dextro. vel sinistro nu-  
merū graduū eiusdem signi habebis. Si aut ascensione3 rectam propositam  
non inueneris precise in area tabulę memoratę accipe duas ascensiones rectas in tabula  
expressas quaz altera quidem proximo minor extat ascensione proposita. altera aut un-  
mediate maior 7 minor earū ex maiore dempta numerū reliquū3 appellabis primū: qui  
quidem est portio vni graduū ecclipticę debita: deinde predictam ascensionem minorem  
subtrahē ab ascensione recta proposita. 7 residuū pro numero secundo teneto: terci⁹ aut  
numerus semper erit. 60. minuta. duc itaq3 secundū in terciū 7 productū diuide per pri-  
mū: quod nāq3 huiusmodi diuisione partum fuerit de minutis adiciendum erit nume-  
ro graduū ecclipticę ex directo ascensionis rectę minoris inuento. 7 colligetur numerus  
graduū ac minorū. quos habet arcus ecclipticę quesitus. Sit verbi gratia ascensio  
recta data. 97. gradus. 7. 54. minuta quaz non inuenio precise in area tabulę ascensionū  
rectarum. Sed proximo ea minor est. 97. gradus 7. 38. minuta. primo autem maior. 98.  
gradus 7. 43. minuta harum ascensionū differentia est vnus gradus et. 5. minuta id est.  
65. minuta per resolutionē ecce primus numerus. minor deniq3 dictaz ascensionū3 sub-  
tracta ex ascensione recta proposita relinquit. 16. minuta secundū scilicet numerū: terci⁹  
autē numerus erit. 60. minuta iduco igit fm in terciū pducitur. 960. scda. que diuisa per  
primū numerum sc3. 65. minuta eliciuntur. 15. fere minuta addenda. 7. gradibus cancri.

Sextum Problema.

**P**unctum ecclipticę cum quo stella queuis celum mediat perscrutari. Huius-  
modi punctum ecclipticę non potest facilius. ac breuius inueniri. quā p ascē-  
sionem rectam ipsius stelle: quo certe premittendum erat qua non lege talem  
ascensionem rectam computare liceret. Sed ipsa ascensio recta sepe numero vti-  
lis est. 7 per maxime in directione significatoris cuiuscunq3. tam etsi punctū cū quo signifi-  
cator talis celum mediat ignoretur. Unde seorsum docere libuit computationem ascensio-  
num rectarum: ne quis directurus significatorem que inpiam arbitretur opus esse inue-  
ntione puncti. cum quo significator huiusmodi celum mediat. Ad rem igitur reddeutes  
posteaq3 ex altero duorum antecedentium documentorū tertio scilicet. vel quarto didici-  
mus ascensionem rectam stelle propositę. queremus eam in tabula ascensionū rectarum  
ab ariete incipientium 7 ex directo eius in capite quide3 tabulę signum: in latere autem  
gradum eiusde3 signi. cu3 quo stella talis mediat celū duplici ē introitu si opus fuerit  
offendemus. Talis enim ascensio recta cōmunis est stellę propositę. 7 graduū vel puncto  
ecclipticę. cum quo ipsa mediat celum: Huius aut problematis exemplū si desideras  
ad precedens refugiendum est problema.

Septimum Problema.





**A**rcui ecliptice quantocumq; in omni regione cuius latitudo .60. gradus non excedit ascensionem obliquam per cōputum certum deputare. Cognita latitudine regionis ad quā operari instituitur aut elevatione poli supra orizontē, quēcumq; voles. Intra tabulam ascensionū obliquarū ei subiectam cum signo, & gradu finali arcus propositi, & in angulo cōmuni habebis ascensionē obliquam respondētem arcui ecliptice proposito computandam quidem a sectione vernali: si arcus ecliptice datus ab eadem sectione sumpserit initium. Si vero aliunde arcus quēpiam ecliptice inchoaueris quere primo ascensionem obliquā principio eius debitam secundū modum iam nunc traditū: deinceps pariformiter ascensionē obliquā finis eius attinentē adiscas. Subtracta enim ascensione obliqua principij ab ascensione obliqua finis eius accommodato integro circulo si opus fuerit relinquatur ascensio obliqua propositi. Ascensio tamen agendum esse duplici introitu vt assoler: si que ultra gradus integros minuta fuerint in arcu ecliptice proposito. Si deniq; elevato poli minuta quedam habuerit operari primo per elevationem poli proximo minorem scdm modū iam exposi- tum. Deinde p latitudinē proximā maiore & inuenta duplici ascensione obliqua ad eundē arcum ecliptice minorem deme ex maiore: relictā namq; differentia respōdebit vni gra- duī elevationi poli: de qua accipe partem proportionalem scdm proportionem minorūq; ultra gradus integros elevationis poli existentū ad .60. hanc itaq; partem proportiona- lem adde ascensioni oblique prime si ipsa minor extiterit ascensione obliqua secunda, aut ab ea minue si ipsa prima superauerit secundam. Nam quod alter horū modorū cūeniet ascensionem obliquam numerabit quam querebas. In exemplo facilius accipies ha- beat arcus quidam ecliptice .12. gradus & .15. minuta virginis volo inuenire ascensio- nem eius obliquam in regione cui polus eleuatur. 47. gradibus & .45. minutis. Intro- cum .12. gradibus virginis tabulam. 47. graduū & inuenio .155. gradus & .46. minuta quos demo ex .157. gradib; & .7. minutis que respondent .13. gradibus virginis in eadez tabula. 47. graduū: de differentia autē relictā que est viuis gradus & .21. minuta accipio partem proportionalem scdm proportionem .15. minorūq; ad .60. hec pars proportio- nalis est .20. minuta fere addenda prime ascensionī oblique: item eandē ascensionē primā cōfero ad .155. gradus & .29. minuta quos repero iuxta .12. gradus virginis in tabula. 48. graduū & de differentia que est .17. accipio partem proportionalem scdm proportionem .45. minorūq; elevationis poli ad .60. minuta: pars illa proportionalis est .15. minuta fe- re subrahenda ab ascensioe obliqua prima: habeo itaq; duas partes pportionales qua- rum altera quidem est addenda prime ascensionī oblique: altera autem minuenda ex ea quamobrem demo minore earū ex maiore & relinquūtur .7. minuta que adiecta sepe me- morate ascensionī prime constant ascensionē obliquā quē sitā. 155. graduū & .53. minorūq;.

*ascensionem obliquam* **Octauum Problema.**



**A**scensionem obliquam cuiuscumq; arcus ecliptice dimetiri. Si arcus ecliptice propositus ab ariete sumpserit initium adde ei semicirculum, & aggregari arcus ecliptice ascensionem obliquā ex precedenti ad discas de mpto enim se- micirculo ex iam memorata ascensione obliqua relinquatur descensio obliqua arcus propositi a sectione vernali cōputanda. Sed arcu ecliptice proposito aliunde sur- mente initium quere ex precedenti ascensionē obliquā arcus eis diametraliter oppositi. Nam tanta quoq; erit descensio obliqua arcus propositi. Arcus autem diametraliter op- positos appello eos quorū principia inuicem & fines diametraliter opponuntur. Descen- sio vero recta arcus quācumq; in orizonte videlicet recto equalis est: immo eadem ascē



honi recte eiusdem arcus quamobrem non erat opus seorsum tradere quo pacto talis  
 ascensio recta computaretur. **E**xempli gratia volo numerare descensionem obliquam  
 ad finem. 12. gradus virginis in regione habente latitudinem. 48. graduum. Adde arcui  
 eccliptice proposito semicirculum et perducor ad. 12. gradus piscium quorum ascensio obli-  
 qua est. 351. gradus et 21. minuta ex qua ascensione demo semicirculum scilicet. 180. gra-  
 dus et relictos. 171. gradus cum. 21. minutis pronuntiabo descensionem obliquam arcus  
 propositi. Sed si libeat inuenire descensionem totius signi virginis accipio arcum ei diame-  
 traliter oppositum scilicet totum signum piscium cuius principium quidem habet ascensionem obliquam  
 345. graduum et 10. minutorum: finis autem est. 360. demptis igitur illis ex istis relinquuntur  
 mihi. 14. gradus et 50. minuta et tanta erit ascensio obliqua signi virginis.

### Monum Problema.

**Q**uantus arcus eccliptice debeatur cuicumque ascensioni, vel descensioni oblique  
 perscrutari mitte numerum ascensionis oblique in tabulam ascensionum obli-  
 quarum: eam videlicet cui latitudo regionis, vel eleuatio poli data supra scriba-  
 tur: et ex directo ipsius in summitate quidem tabule offendes signum zodia-  
 ci: in latere autem numerum graduum eiusdem signi, qui debentur ascensioni oblique  
 propositae quemadmodum in quinto problemate circa ascensiones rectas monuimus.  
**S**i tamen eleuationem poli septentrionalis nusquam inueneris precise, quod accidit minu-  
 tis quolibet iuxta gradus existentibus: operare primo per tabulam latitudinis proximo  
 minoris, secundum viam iam nunc monstratam. Deinde similiter per tabulam latitudinis pro-  
 ximo maioris: et de data arcuum eccliptice, inde elictorum summe partem proportionalem  
 proportionem minorum quae adiacent gradibus integris propositae eleuationis poli: quam  
 partem proportionalem adde arcui eccliptice per tabulam minoris eleuationis compue-  
 rato si ipse minor fuerit arcui eccliptice per tabulam maioris eleuationis reperto: aut ab  
 eo minue si maior eo fuerit: et quod vel addendo colligetur, vel minuendo relinquetur,  
 prout res ipsa postulat numerabit arcum eccliptice quaesitum. **S**ed quantus arcus respon-  
 deat descensioni propositae si scies: ipsi descensioni date circuitum id est. 180. gradus ad-  
 de et aggregato tanquam ascensioni oblique arcum eccliptice computa secundum modum iam  
 nunc traditum: a quo arcui eccliptice semicirculum videlicet. 180. gradus aut sex signa  
 communia minue, quod enim relinquitur erit arcus eccliptice, quem petebas. **N**ec autem  
 documenta tenent: ascensione, vel descensione obliqua a sectione vernali initium sumen-  
 te. **N**am si aliunde inciperet inuenienda essent modo praedicto duo puncta eccliptice quo-  
 rum alterum quidem principio alterum autem fini talis ascensionis, vel descensionis ob-  
 lique responderet. Arcus enim eccliptice duobus talibus punctis interceptus esset qui  
 querebatur. **I**s quidem modus erit exacte computationis. **N**am si celerius, ac prope verum  
 agere decreueris, licebit uti tabula ascensionum obliquarum, cuius inscriptio, aut titulus vici-  
 nior: erit latitudini regionis, vel eleuationi poli ad quam volebas operari. **N**unc quo faci-  
 lius ante dicta intelligant exemplaria computatio subicienda est: vix quando iuxta gradus ele-  
 uationis poli non sunt minuta aliqua operatio oio similis erit ei, quam in quinto problemate ex-  
 posuimus. **S**i itaque eleuatio poli. 47. graduum et 45. minutorum: ascensio autem obliqua  
 proposita. 70. graduum et 36. minutorum procedendo secundum modum quinti problematis in-  
 uenio. 7. gradus et 26. ferme minuta cancri ad eleuationem poli. 47. graduum. similiter  
 ad eleuationem poli. 48. graduum reperio. 8. gradus et 21. minuta cancri. **I**llorum duorum  
 arcuum eccliptice differentia est. 55. minuta de quibus pars proportionalis secundum proportionem

semicirculus



ex m. defensio:

45. minutoz ad. 60. est. 41. minuta fere, que adiecta arcui eccliptice ad. 47. gradus  
reperito constant. 8. gradus 7. minuta cancri: arcu scilicet eccliptice questum pro descen-  
sione demum obliqua. Breue exemplum accipe: offertur mihi descensio obliqua. 97.  
graduū 2. 34. minutoz cui correspondente arcu eccliptice iubeor inuestigare ad ele-  
uationē poli. 48. graduū. Ad iungo memorate descensionē. 180. gradus 7. resultant. 277.  
gradus 2. 34. minuto, hunc arcu tanq̃ ascensionem obliquā offendendo in tabula. 48.  
graduū iuxta 12. gradus sagittarij, reiectisq; 6. signis cōibus per ducoz ad. 12. gradus ge-  
minozum, qui videlicet respondent oblate descensionē.

C Decimum Problema.



Ascensionem obliquā stelle cuiuscunq; in orizonte quolibet dinumerare: huic  
nostro proposito seruiet tabulę differentiarum ascensionaliū, dū stella nō plu-  
ribus q̃. 32. gradibus ab equatore remouetur. In latere enim sinistro dicte ta-  
bulę vtriusq; partis tam borealis, q̃ australis declinatio vsq; ad. 32. gradus  
ponit, q̃ nullus planetarum: quoz gratia potissimum tabulā ipsam: condidimus, tantaz  
declinationē egredi soleat. In latere autem supiori transuerso ponunt elevationes poli  
septentrionalis supra orizontes regionū, ac circulos positionū vsq; ad. 60. gradus. Et rea-  
autem tabulę differentias ascensionū cōplectitur. Elevationē igit poli quere in fronte ta-  
bulę memoratę: declinationē aut stelle siue borealē, siue australem in latere sinistro. Nam  
q̃d in angulo cōi offendes erit oria ascensionū stelle ppositę: quā demas ex ascensione re-  
cta stelle supius inuēta: si declinatio stelle borealis fuerit: aut idē adicias si australis ex-  
titerit. Sic. n. vel relinquet vel colligetur ascensio obliqua stelle: quā querebas ad orizō-  
tē propositū. Qd si stelle fixę ampliorē q̃. 32. graduū declinationē habēis ascensiois obli-  
quā cōputare libeat. Intra bis tabellā secundā cū eleuationē poli supra orizontē datum, 7.  
numez ex directo eius occurrentē seruabis. Similiter in eadē tabella accipies numerū  
cū declinationē stelle ad quācūq; partē fuerit hozz numeroz alter alterz multiplicet, 7. p-  
ductū p. 6. extendat. Reiectisq; primis. 6. figuris versus dextrā vnitatē relictis iungēdo  
si reiectę plus. 500000. denotauerint relinquetur sinus rectus differentię ascensionū stel-  
le propositę. Cuius sinus arcum docebit tabula sinum maximum habens. 60000. parti-  
cularum. Cognita itaq; differentia ascensionum vteris ad ascensionem obliquam stelle  
sciendam, quemadmodū iam pridem monuimus. Facilius tamen idē efficies si tabula  
tua maximum sinum habeat. 100000. Nam altero duozum numerozū per eleuationē po-  
liac declinationem stelle inuentozum in alterum multiplicato a producto abijcies qnq;  
figuras primas versus dextram vnitatem relictis adiuncta si abiecte plus. 50000. repre-  
sentauerint, 7. reliqui sinus recti arcum ex tabula memorata elicies, qui erit differentia  
ascensionum proposito tuo conducibilis. Sic tamen animaduertendum q̃ quando dif-  
ferentia ascensionum ab ipsa ascensione recta subtrahi nequit adiciendus est integer cir-  
culus. 360. graduum, 7. ab aggregato minuenda est differentia ascensionum prefata. Si-  
militer quando differentia ascensionū adiecta ascensioni rectę numerum maiorū. 360.  
gradibus coacruauerit ipsi. 360. gradus reiciendi sunt: relictis videlicet pro ascensioe  
obliqua computaris. Cū exemplo repetatur stella secundi problematis que habuit  
declinationem septentrionalem. 9. graduū 2. 51. minutoz volo inuenire ascensionem  
eius obliquam in orizonte cui polus eleuatur. 48. gradibus per tabulā igitur differen-  
tiarum ascensionaliū sub eleuationē poli. 48. graduū cum declinationē. 9. graduum  
2. 51. minutoz duplici introitu inuenio differentiam ascensionum. 11. graduum. 7. 7.  
minutoz quam demo ex ascensione recta stelle inuenta per tertium aut quartum pro-

ed: 7. M.

ed: auct. A. q.

mon  
gnalis



bleuma quē. 164. gradus. 2. 34. minuta sic enī relinquitur ascensio obliqua. 155. gra-  
duum. 2. 27. minorū. Secundum viam autem vniuersalem sic procedo. In tabella se-  
cunda iuxta numerum elevationis poli. 48. gradū inuenio numerum. 11 1062. quem  
seruo ad partem. Item per eandem tabellam cum declinatōe stelle duplici introitu eli-  
cio aliū numerū. 17364. quem duco in prius seruātū numerū pducuntur. 1928480568.  
ille numerus per senarium multiplicatus reddit hunc. 1 1570883408. abieciis autē  
primis sex figuris adiectaq; vnitate vt assolet remanet mihi signus differentie ascen-  
sionum. 1 1571. cuius arcus est. 11. gr̄dus 2. 7. minuta cum quo tandem vt prius ascensio  
obliqua reperitur. Tabellam autem sepe dictam non iniuria secundam appellare libuit  
q̄ multiuariam ac mirandam vtilitate instar secunde arboris parere soleat.

**O**Undecimum Problema.  
Ascensionem obliquā stelle cuiuscunq; numerare inuenta differentia ascensionum stelle propositæ ex precedenti documento adde eam ascensioni recte ipsius stelle declinationem septentrionalem habentis: vel minue huiusmodi differentiam ascensionum ab ea, si declinatio stelle fuerit meridiana. Nam quod colligetur, aut residuabitur erit descensio obliqua stelle propositæ. Hic non est opus exemplo aliquo speciali cum differentia ascensionum, quæ prius addita est pro ascensione obliqua habenda, hic subtrahitur pro descensione obliqua, et contra quæ ibi subtrahitur, hic additur.

**A** **Quodecimum Problema.**  
Rcū semidiurnū solis, vel alterius stelle cuiuscūq; cognoscere iuenias mō p̄di  
cto. 10. pbleumatis dīam ascēsiōnū stelle q̄ ē ē dimidia dīa diei eqnoctialis, z  
dīe inequalis stelle: eā igitur. 90. gradibus adiunge si stella declinationē septē  
trionalem habuerit: aut ex eis. 90. gradibus minue pro stella declinationē habente me  
ridianam: sic enim vel constabis, vel residuabis arcū semidiurnum stelle p̄positę: quo  
demum ex. 180. gradibus dempto relinquetur arcus seminocturnus. Et item arcū semi  
diurno duplato arcus diurnus, z seminocturno geminato nocturnus prodibit arcus.  
Quorum utrumuis si per quindenos quidem gradus partiatis, numerus horarū equa  
lium ei respondentū p̄siliet: per duodenas autem particulas si secueris: quantitas ho  
re inequalis, vel temporalis emerget. Idem quoq; efficeris per differentiam ascensionū,  
aut dimidiam dierum differentiam. Nam si eam per. 15. diuiseris z numerum quotiens  
denario addideris pro septentrionali declinatione: aut ex ea dempseris pro meridiana  
habebis numerum horarum equalium tēporis semidiurni cuius duplum horas totius  
diei numerabit. Si deniq; eandem differentia ascensionū per senariū distribueris, z nu  
mero nascenti. 15. adieceris pro septentrionali declinatione aut ex. 15. dempseris pro me  
ridiana resultabit q̄stitas hore inequalis. **N**ex arcus diurnū solis alia lege cōputari po  
terit: subtractis. n. ascensionib; obliq; loco solis q̄o respōdentib; ab ascensionib; obliq; p̄  
cto ei diametraliter opposito p̄tinentib; relinquet arcus diurnus solaris. Idē quoq; mo  
dus obseruabis: de quocūq; p̄cto eclipticę tñ si sol i eo nō fuerit. **Q**d si habueris tabulā  
ascensionū rectaz apud capricorniū incipientiū. Subtrahē ascensionē obliq; cuius p̄  
cto eclipticę debitam ab ascensione eius recta, z relinquetur arcus semidiurnus eius dē  
puncti. **R**epeto exempli causa stellā cuius differentia ascensionalis est. 11. gradus. z. 7.  
minuta quemadmodū in decimo p̄bleumate ostēsum est: que vocari solet etiam dimi  
dia differentia diei equinoctialis, z diei inequalis quare cū arcus semidiurnus equino  
ctialis sit. 90. gradū, z declinatio stelle sit septentrionalis addo eā. 90. gradibus z resul



tant. 101. gradus cum. 7. minutis. Tantusq; habetur arcus semidiurnus stelle propositæ. Quem deinceps minuo ex. 180. gradibus, et remanet arcus seminocturnus. 78. gradus ac. 53. minutorum. Item duplabo arcum semidiurnum et eueniunt. 202. gradus et. 14. minuta pro arcu diurno. Similiter duplabo arcum seminocturnum resultant. 157. gradus cum. 46. minutis arcus scilicet nocturnus: deinde arcum diurnum diuido per. 15. et exeunt. 13. hore equales cum. 29. minutis hore accipiendo videlicet vice vniuscuiusq; gradus relictis post diuisionem. 4. minuta et pro singulis. 15. minutis gradus vnum minutum hore: preterea diuido arcum diurnum per. 12. et exeunt. 16. gradus cum. 51. minutis: residuum. n. facta diuisione per 60. multiplicauit et producto addidi minuta. 14. collectumq; totum ite per. 12. diuisi ascendunt igitur. 16. gradus. et. 51. minuta in vna hora temporali vel inequali. Cetera omnia sunt facillime computationis.

*ho p[ro]p[os]it[us]  
sem p[ro]p[os]it[us]*

#### CDuodecimum Problema.

**P**unctum ecliptice cum quo stella quevis vel oritur, vel occidit inquirere. Inuenta ascensione obliqua stelle propositæ per. 10. problema, quere arcum ecliptice ei respondentem per. 9. punctus enim terminalis eiusdem arcus ecliptice oriri solet cum stella proposita. Non aliter elicies punctum, cum quo occidit si prius didiceris quantus arcus ecliptice descensionis eius oblique tribuatur. Est et alius modus inueniendi punctum, cum quo stella occidit. si enim ascensio oblique ipsius stelle arcum diurnum eius adieceris prodibit ascensio obliqua puncti orientis dum stella occidit. Eo igitur puncto per. 9. problema cognitio: punctus quoq; diametraliter ei oppositus haud quaquam latebit, cum quo videlicet stellam propositam oportet occidere. Exemplo autem nullo opus est in presentiarum, si non, et decimum et vndecimum problema satis didicisti. Sed mirabitur forte quispiam quod tunc computandis ascensionibus, et descensionibus immoratus sum, quando quidem directiones precipue tractare instituerim: nemini profecto iniquum videri debet illud, si quidem absque noticia ascensionum, ac descensionum directiones absolui nequeunt: ymo directio non est aliud nisi arcus quidam equatoris coascendens, vel condescendens cuiuspiam arcui ecliptice, aut alij intervallo duorum locorum cognitorum veluti inferius explanabitur. Quicumq; igitur in dirigendis significatoribus expeditus esse volet in computu ascensionum, ac descensionum prius apprimere exerceatur necesse est. Nunc ad negocium equandarum domorum descendere libet: et nanque res doctrinam directionum antecedere debet: cum significatores nonnunquam ad cuspidem domorum: aut ipse cuspidem ad alia loca dirigit solent.

*Directio videt*

#### CDecimumquartum Problema.

**I**ncipia duodecim domorum celi rationabiliter constituere. Priusq; ad propositum absoluendum venietur paulo altius ordiendum est, ne precepta nostra inania, ac fundamenta carentia quispiam suspicetur. Tres equandarum domorum accepimus modos, quorum primus et vstratissimus arcum semidiurnum puncti ecliptice orientalis: aut arcum equatoris ei similem inter equas secant portiones, et arcum seminocturnum eius in totidem: per punctaq; diuidentia, et punctum ecliptice orientale, ac polum mundi utrunq; fingit quinque circulos magnos, qui cum meridianis totius zodiacum, et totum celum in. 12. partes diuidunt, quas vocant domos: hec domorum distinctio, quæ fluxa, et fragilis sit pace vulgarum astronomorum dixerim, ex problematibus, que super almagesto ptolomei conscripsimus aperte quibus intelliget. Nam ut ex multis pauca decerpantur spacia domorum hac lege distinctas: magnitudines certas, ac firmas seruare nequeunt: quas profecto seruandas esse constiteris, si circa influxum



xta aut proprietates huiusmodi domoz recte philosophari libeat. Oriente quippe can-  
 cro in regione diem longissimū. 16. horarum habente. 1. domus: verbi gratia spacium  
 tenet duplum ei quod habet talis domus vndecima: ascendente capricorno. In regione  
 autem culus dies maximus. 18. horas equales complectitur huiusmodi spacia. 11. domo  
 in proportionem tripla reperiuntur. Cui ergo persuadebitur vsquam eūdem esse influxū  
 tam diuersis qz inaequalibus celi partibus: siue celum quiescens posueris: vnde virtutes  
 12. domiciliorum diriuentur: siue propter variam celi ad faciem terre habitudinez pro-  
 prietates domozum distinxeris: etiam domos ipsas ab orizonte truncari necesse erit: alte-  
 ris quidem earum partibus supra orizontem: alteris autem sub orizonte manentibus:  
 quod sententia vnanimi priscorum philosophorum contrarie liquet: afferentium sex q-  
 dem domos totas supra orizontem: sex autem sub eo constitui: preterea stellam aliquam  
 iam dudum ortam in domo prima impudens fisset astronomus: stella 3 deniqz longe ab  
 orizonte occidentali sursum remotam sexte domui turpiter intrudet: que res quantaz z  
 quam horrendam iudicibus fallaciam ingerant facile quisqz persentiet. Taliter autem  
 compono domos distinguere libuit per circulos videlicet quattuor: magnos orizonti z  
 meridiano coincidentes in vtraqz earum cōmuni sectione. Nam super altera huiusmodi  
 sectionum tanqz polo circulum magnum descriptum intelligit per verticem capitis aut  
 regionis transeuntem: huiusmodi quadrantes meridiano z orizonte interceptos in tri-  
 nas equales secari portiones imaginatur: z per puncta sectionum duci quattuor me-  
 ioratos circulos: qui vna cum meridiano z orizonte circulum verticalem ante dictum  
 itemqz eclipticam ac totū insuper celum in duodena partiuntur intervalla: fitqz hac di-  
 stinctione vt quouis dicta. 12. spacia celi siue corporalia intellexeris: siue suplicilia equa-  
 les inuicem magnitudines sortiantur: eclipticę tamen. 12. partes inaequales semper repe-  
 riuntur: preterqz dū poli eclipticę cum duabus orizontis z meridiani sectionibus cōcur-  
 runt: quod accidit in regione cuius latitudo maxime solis declinationi equatur. Modus  
 tamen ille qz alienus sit a mentibus antiquoz z qz futilis qz circulo verticali imagina-  
 rio ac nihil virtutis habenti innitit: silentio pretereundum censemus. Ne paulo licenti-  
 euagari videamur cū z maxime pleniorē huius negocij absolutionē aliunde expectā-  
 dam esse iusserimus. Tertius modus habet mediū inter duos memoratos vtroqz scili-  
 cet eozum participans: diuidit enim quattuor quadrantes equatoris meridiano z orizon-  
 te obliquo interceptos in trinas equales portiones: z per puncta sectionū ducit quattuor  
 circulos magnos meridiano ac orizonti concurrentes in duabus eoz sectionibus: tales  
 itaqz sex circuli assumptis scilicet meridiano z orizonte totū celū in. 12. spacia partiuntur  
 que nuncupantur domus. Ne autem domus z si inaequales inuicem sint in omni orizonte  
 obliquo: tamen suam queqz seruat magnitudinē inuariabilem. Sic sectiones quidem in  
 equatore sumuntur vt in primo modo non in circulo verticali: concursus autem circa lo-  
 cum domos distinguentium fit in sectionibus cōmunibus meridiani z orizontis veluti  
 in secundo modo non in polis mundi: ac via media secure ac rationabiliter gradiemur  
 vbi in cōmoditates duobus modis extremis obicis solitas haud quāqz formidabimus: ve-  
 rum munimenta huiusmodi vie cū z multa sint absqz nimis longa digressionē narra-  
 ri nequeant missa facimus. Ne disputare potius videamur qz tabularum  
 nostrarū vsum explanare: quod profecto principaliter intendimus: he sitāt aut quocūqz  
 circa traditiones nostras liber secundus pbleumatū almae est perlegendus est vbi z  
 fundamenta tabularum nostrarum: z rationes equandarum domoz ac dirigendorū fi-  
 gniſicatorum cum plerisqz rebus alijs iudicio astrologico conducibilibus abunde expo-



latitudinem

sumus. **N**unc ad rem ipsam redeuntibus docebitur quo pacto in omni habitatioe eius  
ius latitudo. 60. gradus non excedit initia. 12. domoz celi cognoscenda sint. Intra igitur  
tabellā domozum rationabilem cū longitudine regionis tue aut eleuatione poli borealis:  
et duos numeros ex directo eius occurrentes diligenter serua seorsum: quoz primus qui/  
dem inscribitur numerus polaris. 11. et tertie nonne ac quinte domozum: secundus autē 3. 12.  
et secunde octauę ac sextę. Ille autem numerus polaris notificat arcū circuli magni qui  
a polo boreali circulo domū quāuis determinanti ad rectos incidit angulos: deinde vī/  
deas cui tabule ascensionum obliquaz supra scribitur numerus polaris vñdecime do/  
mus: nam ea semper vteris in tua regione ad principia. 11. et tertie domoz inuenienda.  
Similiter explorandum est que tabule ascensionum obliquarum supra scriptuz habeat  
numerum polarem. 12. et secunde: nam illa semper prebebit initia. 12. et secunde domo/  
rum: hoc pacto ascensionibus rectis loco solis respondentibus adde gradus equatoris  
a meridie exortos qui per horas equales distantie solis a meridie cognoscuntur vñcuiq;  
videlicet hore. 15. gradus tribuendo et colligitur ascensio recta medij celi vñde et p quib;  
tum probleuma medium celi sciatur: deinde ascensionem recte medij celi. 30. gradus adici/  
as et congeries talis erit ascensio obliqua principij. 11. domus debita: per tabulam itaq;  
11. domus cui vñ numerus polaris. 11. domus supra scribitur inuenias arcum ecliptice di/  
cte ascensionem oblique respondentem. Finis enim huius arcus erit initium. 11. domus: itē  
idem ascensionem oblique. 11. domus iunge. 30. gradus et aggregatum erit ascensio obliqua  
pertinens ad principium. 12. domus. per tabulam igitur. 12. domus quere arcum eclipti/  
ce debitum et habebis initium. 12. domus: amplius memorate ascensionem oblique. 12. do/  
mus adicias. 30. gradus et colliges ascensionem obliquā ascendētis. Ex tabula ergo re/  
gionis tue per. 9. probleuma graduū ascendētis et initium prime domus addisces: po/  
stea ascensionem oblique ascendētis. 30. gradus appone et habebis ascensionem obliquam  
principij secunde domus: vñde et per tabulam suā modo sepe dicto initium secunde do/  
mus non latebit: similiter ascensionem oblique secunde domus. 30. gradibus adiecius resul/  
tabit ascensio obliqua tertie domus: ac demum per tabulam suam principio ipsius dom/  
cognoscendo via parabitur: In summa sic accipies ex ascensione recta medij celi p ad/  
ditionem continuā trigenoꝝ graduū nasci solent ascensiones oblique reliquaz qñq;  
domozum per tabulas eis accommodatas suscitare. Postquā autem sex domoz capita me/  
moratarum cognoueris initia reliquarū quoq; sex domozum haud quāq; latebunt cum  
suam queq; comparem per diametrum circuli aspiciat. **E**xemplo huic documento sub/  
iungendū est: habeat sol. 6. gradus thauri distans a meridie per tres horas et. 14. minu/  
ta: volo inuenire principia. 12. domozū celi ad latitudinē. 48. graduū. In tabella igit do/  
mozum rationabili iuxta. 48. gradus latitudinis inuenio numerum polarem. 11. et tertie  
domozum. 29. graduū et. 2. minutoꝝ: numerum autē polarem. 12. et secunde. 43. graduū  
et. 53. minutoꝝ hos numeros serua seorsum: deinde per tertium probleuma inuenio ascē/  
sionem solis rectam. 33. graduū et. 40. minutoꝝ: pro vñaqueq; aut hora distantie a meri/  
die accipio. 15. gradus equatoris et pro quaternis minutis hore vñū gradum vñ fieri so/  
let: sicq; arcum. 48. graduū et. 30. minutoꝝ colligo distantia videlicet solis a meridiano  
quam addo ascensionem solis recte vt emergat ascensio recta medij celi. 82. graduū et. 10.  
minutoꝝ et ipsum celi mediū. 22. gradus cū. 49. minutis geminoꝝ cuius demū ascensio  
ni recte addo. 30. gradus et resultat ascensio obliqua respondens principio. 11. domus.  
112. graduū et. 10. minutoꝝ: huic quoq; ascensionem oblique. 11. domus addo. 30. gradus  
et prouenit ascensio obliqua. 12. domus. 142. graduū et. 10. minutoꝝ. Similiter per addi



tionem continuam trigenuz graduū efficio ascension es obliquas ad initia reliquarū domorum. Prime quidem cuius initium est gradus ascendens. 172. gradus 2. 10. minuta. secunde autem. 202. gradus 2. 10. minuta. tertie vero. 232. gradus 2. 10. minuta: deinde intro tabulam ascensionum obliquarū. 29. gradibus elevationis poli subiectam cū ascensionibus obliquis. 11. 2. tertie domorum: 2. per documentum noni probleumatis inuenio vnum gradū cum. 28. minutis leonis pro. 11. domo: pro tertia autem. 15. gradus 2. 14. minuta scorpionis. Similiter cum ascensionibus obliquis. 12. 2. secunde domorum: intro tabulam. 44. gradibus suppositam 2. eodem modo reperio vnu gradū 2. 4. minuta virginis pro. 12. domo: pro secunda autem. 17. gradus 2. vnum minutū libe. Non aliter cum ascensionibus obliquis ascendens vel prime domus per tabulaz regionis videlicet. 48. gradibus suscriptam elicio. 24. gradus 2. 14. minuta virginis pro ascendente. Sic inuenta initia sex domorū a medio celi incipientium: reliquarū autē domorū principia per diametrum predictis opponuntur: quare 2. ipsa haudquaquē latebunt: vsus autem sum. 29. gradibus vice. 29. graduū 2. 2. minorū: similiter. 44. gradibus vice. 43. graduum 2. 53. minorū: propter vicinitatem numerorum: cum tabule ascensionū obliquarū ad integros gradus sint facte. hoc etenim pacto nihil erroris sensibilis ingeritur. Si tamen curiose magisq; vtiliter omnia ad vnguem exhaurire libet non nū probleuma consulendum est: iste est modus generalis equandarum domorū ad omnem poli elevationē: quibus nō nihil difficultatis in opere videatur habere: quamobrem si celeriorē computationē desideras: fac tabulam domorū regioni tue propriā scdm modū iam traditū incipiendo videlicet a medio celi vel ascendente: cōmodius tamen est initium a medio sumere celi.

#### Quindecimum Probleuma.



Quoddecim domos celi per circulos magnos in vtroq; polo mundi coeuntes ad quous latitudinem. 60. gradus non excedentem determinare. Est modus hūc valde vsitatus negligere iam pridem decreuerim: tamē hoc in loco docere libuit quo pacto scdm eū quoq; domus equande sint vniuersaliter in quacūq; regione latitudinem. 60. graduū non egrediente: quo abundius siue vtilitas siue amplitudo tabularū presentium demonstratur. Ascensioni igitur recte mediū celi si a sectione vernali inceperit iunge. 90. gradus 2. resultabit ascensio obliqua ascendens qua mediante gradus ascendens per tabulam regionis tue: documentum noni probleumatis innotescet: deinde arcū semidiurnum ascendens per. 12. probleuma cognoscas: quē diuide in tres partes equales: eritq; vnaqueq; illarū partiu dupla ad quantitatem hore temporalis diurne ipsius ascendens: tale autem duplū si dempseris ex gradibus. 60. relinqueretur duplum hore inequalis nocturne ascendens: qualitercūq; autē huiusmodi duplū hore inequalis reperies nihil refert: illud ergo duplū adde ascensioi recte mediū celi 2. resultabit ascensio recta principio. 11. domus respondens que per quantum probleuma arcū ecliptice suū: atq; itcirco initium. 11. domus eliciet: item ascensionē recte. 11. domus adde predictū duplum hore inequalis: sic enim ascensionem rectam principio. 12. domus debi tam conflabis vnde 2. ipsa domus initium sortietur notū: amplius ascensionē recte. 12. domus predictum duplum adde 2. eueniet ascensio recta ascendens: cui hore nocturne adiunge duplum ipsius ascendens 2. colligetur ascensio recta initium secunde domus cui insuper si idem duplum adieceris: ascensio recta principio tertie domus seruiet a prodibit. Ex his autem ascensionibus rectis si puncta ecliptice eis respondentia nescires elice, resinertiam tuam turpiter proderes: prefertim cū operatio hec sit vulgaris ad modū 2. ante hac in quinto probleumate sufficienter exposita. Habitis autem initia sex domorum

D B i

Modus v. i.  
vltimus.



a medio celi incipientium reliquarum quoque initia diametraliter videlicet iam memoratio  
 opposita non latebunt. **S**i tamen exemplaris computatio placet ponatur in medio celi  
 12. gradus tauri: volo equare domos secundum hunc modum: ascensio recta huiusmodi me-  
 dij celi est. 39. gradus et 33. minuta quibus adiungo. 90. gradus resultant. 129. gradus  
 33. minuta ascensio scilicet obliqua ascendens: et ideo ascendens ipsum. 23. gradus et 5.  
 minuta leonis huius ascendens arcus semidiurnus per prius exposita est. 105. gradus  
 et 53. minuta: quem diuido in tres equales portiones quarum quaeque habebit. 35. gradus  
 cum. 18. minutis fere et tantum erit duplum hore diurne ascendens: hoc duplum demo-  
 ex. 60. et relinquuntur. 24. gradus cum. 42. minutis: duplus igitur hore diurne addo ascen-  
 sioni recte medij celi quae erat. 39. gradus. 33. minuta: resultat ascensio recta. 11. domus.  
 74. graduum et 51. minutorum cui demum adicio idem duplum et emergit ascensio recta.  
 12. domus. 10. graduum et 9. minutorum: huic quoque addo idem duplum ut nascatur ascen-  
 sio recta ascendens. 145. graduum et 26. minutorum: omitto autem unum minutum quod duplum  
 hore diurne defecit parumper in secundis a. 35. gradibus et 18. minutis. Item dicte ascen-  
 sioni recte ascendens adiungo duplum hore nocturne: sicque colligo ascensionem rectam  
 secunde domus. 170. graduum et 8. minutorum: huic denique aggregato super adiungo pre-  
 dictum duplum hore nocturne et resultat ascensio recta tertie domui tribuenda. 194. gra-  
 duum cum. 50. minutis per illas ascensiones dirigente quinto problemate inuenio pro  
 vndecima. 16. gradus et 4. minuta geminorum pro duodecima. 18. gradus et 36. minuta  
 eancris: pro secunda. 19. gradus cum. 15. minutis virginis: pro tertia autem. 16. gradus cum  
 8. minutis libe. Sic cuspides sex domorum orientalium inueniuntur: unde et reliquarum  
 sex occidentalium initia propter diametralem oppositionem innotescunt.

**Sedecimum Problema.**

**I**nitia duodecim domorum celi secundum reliquorum modum extremum in regione qua-  
 libet latitudinem. 60. graduum non extendere breuiter constituere. Illiusus vie  
 equandarum domorum campanus quidem speculationem exposuit: verum quo  
 pacto executioni numeratorie mandaretur silentio preterijt: quod profecto vel  
 imbecillitatem huius vie: vel difficultatem arguit executionis. Si enim campanus stabi-  
 lem arbitratus est hunc modum: quid enim arcere potuit quo minus artificialem eius  
 usum traderet nisi ipsa negocij difficultas: aut si calculum eius in prompto habuit: igitur  
 eo non edidisse videtur quod huiusmodi domorum distinctionem infirmam esse animad-  
 uertit: posset tamen subuliter potius quam utiliter ita imaginari. Joannes autem ragusinus so-  
 la pene auctoritate campani suffultus cum modum censuit prosequendus: nam ceterorum  
 astronomorum testimonia que sibi vsu venire arbitretur: (pace eius dixerim) non pro sua  
 sed nostra sententia militant: et quidem apertissime quod alibi laus differemus. Is igitur  
 postquam opinionem campani sectari decreuit documentum edidit equandarum domorum:  
 ydoneum quidem proposito suo ac geometricis fundamentis stabilitum verum prolixum  
 ac multum suspitioneque plenum adeo ut sine tedio intollerabili ne unam quidem do-  
 mum quispiam innumeris etiam exercitissimis elaboraret quod et gazulus ille aperte confi-  
 tetur in quarta parte operis sui circa principium. Sex etenim multiplicationibus finem per-  
 sinus et item sex diuisionibus ac cuspidem unius domus inueniendam opus est cum ple-  
 risque additionibus ac subtractionibus et cautelis multiplicibus: quibus itaque huiusmodi do-  
 morum distinctio rationabiliter fundata esse: nondum tamen facultatem computandi nacti  
 essemus quam in presentiarum explanare decreuimus: non tamquam utilem futuram astro-  
 logo: verum potius demonstraturam tabularum nostrarum amplitudinem. Intra igitur tabel-



lam domoꝝ scdm campanũ z gazulum cū eleuatione poli ad tuam regionem: z ex btre  
cto eius inuenies itersticiũ decime domus cū numero polari vndecime iteq; interstici  
um vndecime cū numero polari. 12. domus: hos numeros serua seorsũ cū suis inscriptio  
nibus. Appellatur aut̃ itersticiũ arcus quidaz equatoris duobus circulis domũ q̃zuis  
claudentibus interceptus. Ille numerus vero polaris superius est diffinitus: illud tamẽ nõ  
est ignorandum vndecimã z tertiam domus eundem habere numerũ polare: similiter  
duodecimã z secundã in numero polari cõicare. Qd si cõgeris itersticioꝝ decime z vn/  
decime domoꝝ ex. 90. gradibus dempseris itersticiũ. 12. domus relinquet qd reuera est  
equale itersticio prime domus: itersticiũ aut̃ scde domus equatur itersticio. 11. Qñ  
itaq; libet equare domos fm hunc modũ inuenias prius mediũ celi vt assolet cuius ascẽ  
sioni recte adiugas itersticiũ. 10. dom⁹ z resubtrabit ascẽsio obliqua cuspidi. 11. dom⁹ re/  
spondẽs: qua mediatrice per tabulã numero polari. 11. domus subiectã agnosces punctũ  
eclypice memorate ascẽsioni appropriatũ: qd solẽt appellare cuspidẽ ipsius domus: dein  
de ascẽsionẽ oblique. 1. 1. dom⁹ iuge itersticiũ. 1. 1. dom⁹ z colligatur ascẽsio obliqua. 1. 2. dom⁹  
cui itẽ adiecto itersticio. 12. domus ascẽsio obliqua prime dom⁹ aut̃ ascẽdẽtis pdibit quã  
ẽt habebis si ascẽsioni recte mediũ celi ab ariete incipiẽti quadrantẽ circuli adieceris. Si  
demũ ascẽsioni oblique ascẽdẽtis itersticiũ prime dom⁹ addideris ascẽsio obliqua scde  
domus colligetur: cui tandẽ iteruallũ scde dom⁹ adiuge z hẽbis ascẽsionẽ obliquã tertie  
dom⁹. Unaqueq; aut̃ dictaz ascẽsionũ obliquaz p tabulã numero polari sue dom⁹ subte/  
ctam dom⁹ ipsius cuspidẽ suscitabit cognitã quẽadmodũ p. 1. 1. domo iã nũc monuimus.  
Exẽplo aut̃ nullo opus ẽẽ reor qñ quidẽ modus iste equandaz domoꝝ negligẽdus ẽ: si  
tñ exercitiũ gra periculũ i hac re facere lubet: inuẽtis ascẽsioib⁹ obliqs domoꝝ q̃stiatũ cū  
numeris suis polaribus cuspidẽ earũ non aliter q̃ in decimoquarto probleumate do/  
cuimus addisces.

Decimumseptimũ Probleuma.



Truz stella queuis, aut punctus eclypice quilibet sit in parte celi oriẽtali vel oc  
cidentalĩ dignoscere. Martẽ celi orientalem voco eã que incipit a medio celi z  
ad angulũ terre per ascendentẽ eundo terminatur: medietatẽ videlicet celi q  
ad meridiẽ inspicienti a sinistris existit: reliquã aut̃ medietatẽ que a dextris ẽ oc  
cidentalem. Subtrahẽ igitur ascensionẽ rectã stelle ppositã ab ascensioẽ recta mediũ celi  
ad instãs cõsideratiõis tue adiecto integro circulo si opus fuerit z relinquetur elongatiõ  
stelle a meridiano que si minor fuerit semicirculo. 180. graduũ stellã ipsam in medietate  
occidẽtali dices esse: si aut̃ maior. 180. gradibus in oriẽtali: q si precise. 180. gradus cõple  
ra fuerit angulũ terre stella ipsa occupauit: si aut̃ nihil fuerit residuũ in medio celi stellaz  
esse pronũciabis. Exẽplũ breue mediũ celi hẽat. 22. gradus z. 49. m. geminoꝝ: sol autẽ  
in fine. 6. gradus tauri repiatur volo tẽtare ppositũ huius pbleumatis de sole: ascẽsio re  
cta mediũ ẽ. 82. gradus z. 10. minuta ascẽsio aut̃ recta solis. 33. gradus z. 40. minuta quaz  
minuo ex ascẽsioẽ recta mediũ celi z relinquitur. 48. gradus cū. 30. minutis scz elõgatio  
solis a meridiẽ minor semicirculo: quare solẽ ẽẽ in medietate occidẽtali celi enuncio.

Decimumoctauum Probleuma.

Arum stella sit supra terram, aut sub terra faciliter coniectare. Ex antedictis ar  
cũ semidiurnũ stelle ac semiocturnũ addisces, deide si stella fuerit i medietate  
occidẽtali, z elõgatiõ ipsi⁹ a meridiẽ mior arcu semidiurno, stella ipsa supra ori  
zõrẽ cõstituetur. Si aut̃ dicta elõgatio a meridiẽ arcũ semidiurnũ, supauerit: sub  
terra ṽsabit pposita stella: elõgatiõẽ demũ a meridiẽ z arcu semiocturno existẽtib⁹ eq̃lib⁹

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stellam ipsam orizon occidentalis tenebit. At stella medietatem celi orientalem occupante demptis. 180. gradibus ex elongatione eius a meridie relinquetur elongatio eius ab angulo terre: que si minor arcu seminocturno stelle extiterit: non dum supra terram emerisse stellam dices. Si autem arcu seminocturnu excederit. supra terram proculdubio constituetur. Quod si arcus seminocturnus elongationi ab angulo terre equalis extiterit. stella ipsa orizontem orientale possidebit. Idem aliter experieris ac multo breuius. si prius ascendere gradum punctumque ecliptice quo cum stella oritur: et item punctum cum quo occidere solet recte didiceris: hoc enim pacto scies ultra medietatum ecliptice supra orizontem aut infra eum existat: et si punctum cum quo stella oritur fuerit in parte orientali nondum tamen occiderit: scies stellam quoque nondum ortam esse. si autem punctum cum quo occidit fuerit in parte occidentali nondum tamen occiderit: scies stellam nondum quoque occidisse: pariformiter conijcies stellam esse ortam vel occidisse: secundum habitudinem puncti ecliptice oriri. vel occidere soliti cum ipsa stella: unde tandem situm stelle supra terram ne fuerit an sub terra plane intelliges. Exempli gratia repetatur situs solis qui in precedenti ponebatur: mediu celique idem nunc subiciatur ex duodecimo problemate ad latitudinem. 48. graduum: concludo arcu semidiurnu solis. 105. graduum 7. 32. minutorum: erat autem elongatio solis a meridie. 48. graduum 7. 30. minutorum minor scilicet arcu semidiurno: quare solem supra terram esse pronuncio: cetera omnia facilia sunt.

Decimum nonum Problema.



Istantiam stelle a meridiano concludere. Quis elongatio. et distantia a meridiano promiscue plerumque sumantur: in presentiarum tamen discrimine quoddam eis interiecimus. quo sermo noster articulatio: ac lucidior redderetur: in hoc nempe conueniunt. quod utraq est arcus equatoris conclusum inter meridianus regionis. ac circulum per polos mundi et centru stelle transeuntem. verus elongatio semper a stella versus meridianu secundum signorum consequentiam accipitur. Distantia autem nonnunquam contra signorum sequelam in equatore perpendicularitur: distantia denique semper aut tota est supra orizontem. aut tota infra eum. Elongationis autem pars altera supra orizontem nonnunquam existit: altera autem pars sub orizonte. Si igitur stella supra terram existens nondum attigit meridianu: subtrahere ascensionem rectam medii celi ab ascensione recta stelle: si autem meridianu transierit supra terram adhuc existens: ascensionem stelle rectam ex ascensione recta medii celi demere: et relinquetur distantia stelle a meridiano diurna. Non aliter computabis distantiam eius a meridiano nocturna si sub terra extiterit. Si enim ante meridianum sub terra fuerit ascensionem rectam anguli terre ex ascensione recta stelle minues. Si autem angulum terre transierit contra ascensionem rectam stelle ex ascensione recta anguli terre minues: relinquetur enim nocturna eius a meridiano distantia. versa demum vice si stella supra terram existens nondum attigerit meridianu distantiam eius a meridiano ex ascensione sua recta demes: et relinquetur ascensio recta medii celi: aut si ascensionem suam recte huiusmodi a meridiano distantiam adieceris stella ipsa meridianu pretereunte resultabit ascensio recta medii celi. Similiter ascensionem rectam anguli terre deprehendes si stella talis sub orizonte depressa fuerit. Hinc postremo tam celi medium quam angulum terre per quintum problema cognoscendi dabitur facultas: preterea ascensio solis recta dempta ex ascensione recta medii celi adiecto integro circulo ubi opus fuerit relinquet elongationem solis a meridie. Ex qua tandem quot hore equales post meridiem effluerint facile coniectabis si prius per quindenos gradus memorata distribueris elongationem. Nec breuiter ad modum propter sequentia perstringere fuit consilium: ne ampliandi

et p. 10. m. 6.  
S. 84. m. 10.

et p. 10. m. 6.  
S. 84. m. 10.

Si enim p. 10. m. 6. S. 84. m. 10. a stella subterre  
Si transierit ex stella a meridiano



libri potius q̄ res nouas ac viles tradendi gratia calamū versasse videremur: presertim cum alibi res huiusmodi plerisq; in locis tractare sint et quidem abundissime.

Cligēsimum Problema.

**Q**uāntum eleuatur polus borealis supra circulum positiois stelle cuiusuis aut alicuius signati pūcti in celo inuestigare. Huc huc arripe aures tuas quicūq; totam dirigēdi artem nec non stellas in. 1. celi domicilijs sistendi arte nauicisci viles: cui negotio nōnullas tabulas exarauimus quas tabulas positiois particulares appellare libuit: quarū vnaqueq; in latere suo sinistro geminam habet declinationem septentrionalē scz ac meridianam vsq; ad 32. gradus tantam enim declinationem planete nunq; transiliunt: quoz gratia potissimū dicte tabule sunt contexte. In latere aut superiori videlicet transuersali numeros eleuationū poli supra circulos positiois ordinauimus: arca vero tabule vniuscuiusq; distantias stellaz a meridiano comprehendit. Circulum aut positiois appello eum qui per duas cōes sectiones meridiani et orizontis aut per centrum stelle aut pūctū celi signatum incedit: quē etiam orizontē stelle non: nunq; vocari licebit. Si igitur stella vel pūctus datus supra terrā existit quere declinationem eius in latere sinistro tabule ad regionem tuā facite: in parte quidē superiori si septentrionalis: in parte aut inferiori si meridianā fuerit et inuēsit eius distantia stelle a meridiano siue ante meridianā fuerit siue post meridianā: ex directo enim iaz dicte distantie superius in capite tabule offēdes numerū eleuationis poli quēsitum. Si vero stella aut pūctus ppositus sub orizonte extiterit quere declinationem eius in parte superiori lateris sinistri si declinatio ipsa meridianā fuerit aut in parte inferiori si septentrionalis: in arca aut tabule distantiam stelle a meridiano: et scdm modū iam nunc expositū in fronte tabule offeretur numerus eleuationis poli quē querebas. Et si stella declinatione caruerit querenda erit similiter distantia eius a meridiano in vltimo versu supioris pagine et ex directo eius in capite tabule inuenietur eleuatio poli quēsitā. Et deminisse tñ debes operandum esse duplici introitu qñ distantia a meridiano nō integra offēdit i arca tabule quē admodū facere solemus p ascensionē rectā et arcū ecliptice et debitu inuestigaturi. Si tñ huiusmodi exactā cōputationē paulo remissius curaueris vice numeroz tuoz introituum accipere poteris numeros eis q̄ vicissimos in tabula saltē expressos: sic enī breuissime ac sine errore notabili ppositū tuū consequeris. Cūtus rei grā sit stella quēdā i fine 12. gradus virginis habēs latitudinē septentrionalē triū graduū atq; idcirco declinationē septentrionalē. 9. graduum et 51. minutorum distantia autem eius a meridiano supra terram sit. 53. graduum et 10. minutorum: volo experiri quanta sit eleuatio poli septentrionalis supra circulū positiois eius in regione latitudinis. 48. graduū si declinatio stelle fuisset precise. 10. graduū et distantia a meridiano. 52. graduū cū. 37. minutis inuenisset. 38. gradus eleuationis poli in fronte tabule: vtz declinatio nō hbbet plene. 10. gradus sed propiua est. 10. gradibus quare intranti mihi cū. 10. gradibus partē tabule superiorem occurrit distantia a meridiano primo minor proposita distantia. 52. graduū et 37. minutorum: primo aut maior. 55. graduū et 2. minutorum. oria hāz distantiarū est. 2. gradus et 25. minuta: q̄ cor respondent vni graduū eleuationis poli: hanc oriam pono pro primo numero. Itē 3. minutorum distantia subtrahō a distantia pposita et relinquūtur. 33. minuta pro secūdo numero. tertius aut numerus semp est. 60. minuta: duco igitur secūdū in tertiu nascūtur. 1980. secūda que diuido per. 145. minuta equipolētia duobus gradib⁹ et 25. minutis exeunt ferē. 14. minuta addēda. 38. gradibus: eleuatio itaq; poli supra circulū positiois stelle est 38. graduū et 14. minutorum. Qd si adhuc precisius habere volueris huiusmodi eleuatio

hōrre' illa  
(rem' pōnē  
quid  
mātrā

12. m  
3. la. 5.  
9. 51. dist.  
modū

primo.

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*dimissio*  
*T<sup>1</sup> mns*  
*E dñā distantia. mnti*  
*ambas.*  
*Qdā*  
*T<sup>2</sup> mns*  
*E dñā distantia. mnti*  
*in latus*  
*T<sup>3</sup> mns*  
*E 60*  
*duo, productū addit eleuationis*  
*poli inuenit.*



nem declinatione habente aliqua minuta iuxta gradus: intra primo cū declinatione primo minori extrahendo elevationē poli vt iā dictū est: deinde cum declinatione proximo maiori in tabula expressa et similiter elice elevationē poli: de dīa aut harū elevationū accipe partē proportionales scdm proportionē minorū existentū iuxta gradus declinationis quā adde prime elevationi si secunda maior fuerit ea aut minue ex ea si secunda fuerit minor. hoc enim pacto exactius cōprehendes elevationē poli quesitam.

Cligesimū primum Problema.

**I**n qua. 12. domoz celi stella queuis aut punctū celi quodlibet cōstituatur explorare. De stella semp itelligas aut pūcto celi declinationē. 32. gradū nō egr ediente: postq; igitur ex ante memoratis initia. 4. domozū angulariū cognoueris: itemq; pūcta ecliptice cū quib; stella proposita et oritur et occidit ac celū mediat: aperte cōtēplaberis: sit ne stella in aliquo dictoz anguloz an nō. At si nullū talū anguloz obtinuerit scies in qua quattuor quarta et celi dictis pūctis angularib; iterceptaz cōsistet: vt aut domus eius inueniatur hoc accipe pambulū: domus vndecima et quinta itēq; nona et tertia qzuis duob; circulis positioe differētib; determinētur: polus tñ borealis equaliter ab vtroq; eoz remouetur. Si r duodecima et sexta itē octaua et scda per duos circulos positioe diuersos cognoscūtur: vep tñ polus borealis equaliter supra vtrunq; eozū eleuatur. Cognitio itaq; ex precedēti quātū polus borealis supra circulum positiois stelle eleuatur cōfer numerū huiusmodi eleuatiois ad nūeros polares. 1. 1. 12. domozū per quartūdecimū pbleuma reptos nā si fuerit equalis numero polari. 1. 1. domo et stella ipsa i quarta orientali diurna māserit cuspidē vndecime necessario occupabit. Si aut in quarta orientali subterranea fuerit in cuspidē tertie domo cōstituatur: at si numeris pdictis sese nō excedēb; stella quartā occidentalē sublimē tenuerit: in pncipio none domus pculdubio repietur. Si vō in quarta occidentali subterranea extiterit cuspidē quinte domus eā obtinere necesse est. Sed si eleuatio poli supra circulū stelle positiois numerz polarē. 1. 2. domicilij equauerit eo ordine ac mō vt iā pridē cōiectabimus stellā esse aut in pncipio. 1. 2. aut. 2. aut. 8. aut. 6. domus. In pncipio videlicet alicui; dictazū domoz que cū stella proposita in eadē quarta collocatur q; si eleuatio poli supra circulū positiois stelle nō fuerit equalis alteri duozū nūeroz polariū p̄fatorū certū ē stellā nō esse in cuspidē alicuius domoz memoratarū: vñ si minor fuerit numero polari. 1. 1. domo cōstabit stellā eē in. 10. domo vel. 9. vel. 4. vel. 3. prout quarta stellaz ipsam tenēs edocebit. Si vō dicta eleuatio maior fuerit numero polari. 11. domus: minor tñ numero polari. 12. stella erit aut in 11. aut. 8. aut quinta aut scda. Si aut eleuatio poli sepe memorata excefferit numerū polarem. 12. domus stellam ipsam aut in. 12. aut in. 6. aut. 7. aut prima modo supra scripto cōperies. Noteris ē aliter experiri stellā quauis prope cuspidē alicui; domus existēte scd; locum lōgitudinis sue sit ne ante cuspidē an post eam aut in ipsamet cuspidē p̄sertiz si habuerit latitudinē quā si nō haberet nulla speciali doctrina opus esset. Nam si stella fuerit prope mediū celi aut angulū terre: pūctus celi mediationis stelle cōparatus ad mediū celi aut angulū terre te reddat in hac re certiorē. Si aut ppe ascendente fuerit pūctus ecliptice cū quo stella oriri solet id edocebit. Idē faciet punctus ecliptice cuz quo stella solet occidere si circa gradū occidentē stella extiterit. Si aut circa cuspidē alicuius domorum orientaliū inuenta fuerit scita eleuatione poli supra orizontē eiusdem domus circulū dico q; determinat initū talis domus tertūdecimū problema quere punctū ecliptice cū quo oritur stella proposita supra orizontem eiusdem domus: illud enim punctū cuspidi domus collatum: stelle sitū respectu memorate cuspidis demonstrabit. Non aliter argu





mentaberis per punctū ecliptice cum quo stella occidit sub orizonte alicuius domorum  
occidentalium eius videlicet iuxta cuius principiū stellā tuā offenderis. Nolim o lector  
multitudine yborū absterrearis facillimā. n. ipse confiteberis operationū expositam vbi  
mediocri prius exercitatioe fueris vsus. **Exēplo** tñ breui tranquilloz animū tibi red/  
dam. Stella precedētis problematis habuit eleuationē poli supra circulū positiois sue  
38. graduū 7. 14. minutoz ponatur ipsa in quarta oriēti diurna: ex quartodecimo autē  
problemate ad latitudinē. 48. graduū didici numerum polare; vndecime domus. 29.  
graduū 7. 2. minutoz: numerum autē polarem duodecime. 43. graduū 7. 53. minutoz  
cum itaq; eleuatio poli supra circulū positionis stelle sit maior numero polari vndecime  
domus: minor autē numero polari duodecime concludo stellam esse in. 11. domo. Simili/  
ter in alijs casibus te expedies.

**Vigēsimū secundum Problema.**



**V**trum due stelle vtrūq; propōsite in vno circulo positiois taceant explorare  
Tribus modis stellarū cōiunctiones astronomi cōsiderant primū quide; scdm  
circulos p polos ecliptice incedētes qñ videlicet vnus talis circulus ambas  
cōplectitur stellas. Scdo scdm circulos per polos mundi incedentes. Tercio  
aut scdm circulos meridiano 7 orizonti in duabus eozū sectionibus coeuntes. Hoc gen<sup>o</sup>  
cōiunctionum hali expositoz quadripartiti ptolomei diligenter obseruare solet q; ma/  
gnam in natiuitatibus vim habeat. Huiusmodi igitur cōiunctionez in hoc pposito que/  
rere institimus. Sint ne videlicet stelle propōsite in vno tali circulo an non. Id aut per  
vigēsimū pblema experiri nudū est. Nā si stellis ppositis vna 7 eadē fuerit eleuatio poli  
borealis supra circulū positiois: cōiunctas mō p dicto enunciabimus: si vero diuerse fue/  
rint eleuatioes poli supra circulos positiōnū non erūt cōiuncte. Oportet aut ante oia stel/  
las ipsas in vna 7 eadē quattuor quartaz meridiano 7 orizonte distinctarū cōstitutas esse.  
Simili argumēto vtetur circa quecūq; duo puncta celi qñ eozū cōiunctionē scire de/  
sideramus. Nullo hic exemplo opus esse reor propter facilitatē problematis.

**Vigēsimū tertium Problema.**



**Q**uatis duabus stellis aut duobus punctis celi possint ne mō predicto cōiungi  
infra diē vnuz naturalē perscrutari. Scito primū vtriusq; stelle declinationē  
ac ascensionē rectā: deinde subtrahē ascensionē rectā vnus earū ab ascensione  
recta alterius 7 relinquet dñā hmoi ascensionum rectaz quā vocabimus in/  
teruallū equinoctiale id aut interuallū minus esse debet semicirculo. Nam si maius eue/  
niet conuersim agendū esset minuēdo videlicet ascensionē a qua prius facta fuit subtra/  
ctio ex reliqua accomdato integro circulo si opus fuerit: si aut huiusmodi interualluz se/  
micirculo equale esset stelle propōsite nequaq; mō p dicto cōiungi possent. Cōsidera de/  
mū vtra stellaz prior ad meridianū perueniat qd per ascensiones eaz rectas facile cōijci/  
es: eam etenim precedentem appellabimus: reliquā aut sequentem. Preterea sciendum  
vtra earū polo boreali vicinior existat: qd qdem ex declinationibus earū addisces. Nam  
si equales 7 ad eandem partē equatoris habuerint declinationes non erit earū cōiunctio  
possibilis: nisi ēt simul scdm longitudinē zodiaci coniungantur: qd genus cōiunctionuz  
in presentiarū nobis nō est cure. His ergo sic prestitis quere vtriusq; stelle declinationē  
in latere sinistro tabule positionis ad regionem suā factam notando etiam partem decli/  
nationis vtriusq; primo quidem supra terrā: deinde autem sub terra 7 ex directo vtriusq;  
declinationis percurrere oēs numeros distantiaz a meridiano vsq; ad finem tabule. Nā si  
sub vna 7 eadem declinatione poli duas distantias a meridie inuenieris quarū differētia

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Tripl' cōmēt

Hah.



qualis fuerit intervallo equinoctiali superius seruato: possibilis erit dictarum stellarum coniunctio. Item si inueneris duas huiusmodi a meridie distantias minus dicto intervallo equinoctiali differentes et alias duas predictis immediatas plus eo intervallo differentes iterum possibilitatem coniunctionis predicabis. Ut autem scias in qua parte celi coniunctio talis eueniet illud accipe argumentum. Quando stella precedens meridionalior est sequente et pars declinationis accepta est supra terram memorata coniunctio erit in quarta orientali supraterranea. Vnde vero precedens stella septentrionalior existit in quarta occidentali supraterranea coniunctionem euenire necesse est. Si autem partem declinationis sub terra acceperis et stella precedens septentrionalior fuerit quarta occidentalis subterranea ipsam coniunctionem habebit: parte item declinationis sub terra si fueris versus et stella precedens meridionalior: extiterit in quarta orientali subterranea proculdubio tali coniunctioni locus vendicabitur. Horum preterea memorate coniunctionis opere precium est agnoscere: per distantiam igitur vtriusvis stellarum a meridiano ac ascensione eius rectam: ascensionem quoque rectam medij celi cognosces: ex qua demum ascensione solis recta decimonono problemate dirigente horas a meridie usque ad instantem dicte coniunctionis exactas docte computabis. Elevationem poli autem borealis supra circulum positionis in qua stellae ipsae coniungi oportebit directe supra distantias stellarum a meridiano in fronte tabulae offentes. Quod si vnus quidem excessus distantiarum a meridiano minor fuerit intervallo equinoctiali supra dicto: alter autem maior: eo atque idcirco coniunctio stellarum possibilis vix paulo ante recitauimus. Volueris quae scire elevationem poli borealis supra circulum positionis in quo coniungentur: subtrahere minorem excessum distantiarum a maiore excessu distantiarum a meridie et residuum voca numerum primum. Deinde excessum distantiarum repertarum sub minore elevatione poli: confer ad sepedictum intervallum equinoctiale: differentiamque eorum pro numero secundo statue: tertius autem numerus in hoc negotio semper erit sexagesarius minorum: duc itaque secundum in tertium et productum partire per primum nota, ta diligenter denominatione quae admodum in alijs similibus operationibus fieri solet: erit enim numerus minorum ad elevationem poli minorem addendorum hoc pacto elevationem poli supra circulum positionis stellae ipsas coniungentem rationabiliter computabis. Distantiam autem vtriusvis stellarum a meridiano pro instanti talis coniunctionis hac lege scrutaberis: vide quantum duabus distantijs proximis alterius duarum stellarum interest: distantijs inquam quas ante hoc contractauimus. Acceptamque partem proportionalem de differentia earum secundum proportionem minorum elevationis poli nuper primae inuentorum ad .60. adicias prime distantie a meridiano si minorem secunda offenderis aut ab ea minue si maiorem quicquid enim congregabitur vel relinquetur prout res ipsa postulat distantiam stelle a meridiano pro instanti coniunctionis patefaciet: voca autem primam distantiam a meridiano eam que sese lectori prius offert a latere sinistro tabulae dextram versus eunti: que videlicet elevationem poli minorem supra se habet. Cuiusmodi gratia habeat stella quaedam .2. gradus virginis cum latitudine meridionali. 3. graduum alia autem in fine quarti gradus virginis reperitur cum latitudine septentrionali vnus gradus. Sol vero .7. graduum caeteri obtineat volo explorare an dicte stelle possint coniungi infra diem naturalem in regione habente latitudinem. 48. graduum. et sic coniungentur qua hora id futurum sit: prima stella per primum problemam habet declinationem septentrionalem. 11. graduum. Item per tertium problemam prima habet ascensionem rectam. 152. graduum et 55. minutorum: secunda autem. 156. graduum et 16. minutorum subtrahito itaque alteram distantiarum ascensionum ab altera minore scilicet a maiore et relinquatur. 3. gradus cum. 21. minutis



quos appello interuallum equinoctiale. Cum autem ascensio recta prime stelle sit minor  
 ascensione recta secunde stelle: necesse est primam stellam prius peruenire ad meridia/  
 num q̄ secundam: primam ergo vocabo precedentem et secundam sequentem: est au/  
 tem precedens stella meridionalior sequente id est minus distat a polo australi q̄ secun/  
 da: cum declinatio eius septentrionalis minor sit declinatione septentrionali sequentis  
 stelle. Quero itaq; declinationes dictarum stellarum in latere sinistro tabule positio/  
 num ad. 48. gradus iatitudinis ac si stelle sint supra terram et ex directo earum trans/  
 currendo binas earum a meridie distantias sub elevatione poli. 46. graduum reperio  
 distantiam precedentis a meridie. 77. graduum et. 10. minutorum distantiam autem  
 sequentis. 80. graduum et. 25. minutorum harum distantiarum excessus est. 3. gradus  
 et. 15. minuta qui si fuisset gradus tres. 21. minuta iam concluderetur possibilitas con/  
 iunctionis future in circulo supra quem polus eleuatur 46. gradibus. Sed quoniam  
 dictus excessus minor est interuallo equinoctiali transeo ad sequentes duas distantias  
 quarum una scilicet stelle precedentis est. 83. gradus et. 35. minuta. Alia autem stel/  
 le sequentis est. 86. gradus et. 57. minuta excessus harum distantiarum est. 3. gradus et. 22.  
 minuta: maior videlicet interuallo equinoctiali: quare concludo stellas memoratas  
 coniunctum iri. Cum autem precedens stella meridionalior sit stella sequente et decli/  
 nationes accepte sunt ac si stella supra terram ex istant: coniunctio earum erit in quar/  
 ta orientali supra terram. Ut autem instans coniunctionis mihi innotescat prius inue/  
 nio elevationem poli supra circulum positionis in quo coniungentur hoc pacto. Exces/  
 sus primarum distantiarum est. 3. gradus et. 15. minuta: excessus autem secundarum est. 3.  
 gradus et. 22. minuta quorum differentia scilicet. 7. minuta statuo pro primo numero.  
 Item excessum primarum distantiarum minus ex interuallo equinoctiali et relinquo/  
 tur. 6. minuta pro secundo numero: tertius autem semper est. 60. minuta duco secundum  
 in tertium producantur. 360. secunda que diuido per. 7. minuta et exeunt. 51. minuta fe/  
 re addenda. 46. gradibus et. 51. minutis elevationis poli que ponitur directe supra pri/  
 mas distantias. Sic ergo comprehendo q̄ polus borealis eleuatur. 46. gradibus et  
 51. minutis supra circulum positionis in quo coniunguntur memorate stelle: deinde  
 subtraho primam distantiam stelle precedentis a secunda eius distantia et remanent. 6.  
 gradus cum. 25. minutis quarum pars proportionis secundum proportionem. 51. mi/  
 nutorum ad. 60. est. 5. gradus et. 27. minuta eam partem proportionalem addo distan/  
 tie stelle precedentis resultant. 82. gradus et. 37. minuta: tantamq; dico esse distantiam  
 stelle precedentis a meridie pro instanti coniunctionis ipsarum stellarum: quam distan/  
 tiam demo ex ascensione recta stelle precedentis et relinquitur ascensio recta medij ce/  
 li. 70. graduum et. 18. minutorum: ascensio autem recta solis est. 97. gradus et. 38. mi/  
 nuta quam demo ex ascensione recta medij celi accomodatis. 360. gradibus et rema/  
 net elongatio solis a meridie. 332. graduum et. 40. minutorum qua diuisa per. 15. exe/  
 unt. 22. hore et. 11. minuta quibus a meridie transactis talem coniunctionem fieri ne/  
 cesse est. Hoc autem pro corollario tenendum est q̄ quilibet due stelle propolite aut pe/  
 nitus non coniungentur modo predicto aut bis coniungentur infra diem unum natu/  
 ralem. Semel quidem supra terram et semel sub terra. unde si cum declinationibus  
 assumptarum stellarum ingressus fueris tabulam ac si stelle sint sub orizonte reperies  
 q̄ ipse coniungentur sub terra in circulo supra quem polus eleuatur. 46. gradibus et  
 51. minutis quemadmodum iam pridem accidebat.

CXXV. Problemum quartum.

D B v





Alto quocumq; ascendente in orizonte quolibet reliquarum domorum initia artificialiter elicere. Superius traditum est quo pacto .12. celi domicilia rationabiliter constituentur sumpto exordio ab angulo medij celi: ibi enim per additionem continuam trigenorum graduum ad ascensiones rectas medij celi ascensiones obliquas initijs reliquarum domorum respondentes ac demum per tabulas singulis domibus appropriatas ipsarum domorum principia didicimus: hic autem dato ascendente ex tabula regionis per septimum problemum ascensiones eius obliquas hauriemus a quibus si .30. gradus reiecerimus ascensio obliqua initio .12. domus debita relinquetur. Item ab eadem ascensione obliqua duodecime domus .30. gradus abiecti ascensionem obliquam vnde decime domui pertinentem relinquent q; si adhuc 30. gradus dempseris ascensionem rectam medij celi residuam conspicias. Atq; trigenorum graduum additione continua super ascensiones obliquas ascendentis prime & secunde domorum oblique ascensiones constari solent. Super vacanem autem videtur denuo mouere quo pacto prefatarum domorum principia per ascensiones suas obliquas inuestigentur cum ante hac in quartodecimo problemate id satis explanatum sit: quãuis itaq; memorati negocij gratia presens problemum edidisse videamur tenore verborum id persuadente longe tamen spectabiliorum metam cursui nostro obiectare arbitrati sumus: que vt cognitu facilior reddatur paulo distantius ordiendum est. Solent egregij astrozum iudices vitam parentum ex genitura filij primogeniti & contra diiudicare statuendo videlicet locum solis quidem in natiuitate diurna filij: locum autem saturni in nocturna tanquaz ascendentem patris: itemq; locum veneris quidem in genitura diurna lune autem locum in nocturna pro ascendente matris huic omnium domorum celi eliciunt ordinem: accidentiaq; parentibus obuentura pronunciant. Non aliter faciunt pro moribus fratrum filiorum vxoris amicorum ac inimicorum discernendū ponendo videlicet singulorum significatores pro ascendente que res quanti sit momenti vix paucis dare possemus: id ergo aliunde petendum silentio preterimus ad ceptum negocium principali descensuri. Cum itaq; figuram patris verbi gratia erigere volueris & sol(nascente filio) fuit in ascendente: non erit figura patris diuersa a figura filij. Si autem sol in meridiano extiterit adde ascensioni recte solis .30. gradus & habebis ascensionem rectam principij secunde domus pro figura patris. Item ascensionem recte secunde domus adde .30. gradus & congregabitur ascensio recta principio tertie domus debita. Similiter per additionem continuam trigenorum graduum habebis ascensiones rectas quarte domorum quinte & sexte vnde per quintum problemum principia dictarum domorum & deinde domorum oppositarum cognoscas. Sole autem in angulo occidentis constituto cuspides domorum in figura patris non different a cuspibus domorum filij verum aliud erit principium numerationis domorum: septima enim filij erit prima patris: octaua autem filij pro secunda patris accipietur & ita de reliquis ex ordine. Qd si sol in genitura filij angulum terre occupauerit non aliter q; si in medio celi esset operabimur. Significatore autem paterno nullum dictorum angulorum tenente: elevationem poli borealis supra circulum positionis in quo iacet significator: qui circulus orizon etiam significatoris appellabitur per vigesimum problemum addiscas & si fuerit dictus significator in medietate celi orientali secundum orizontem regionis quere ascensionem obliquam eius in orizonte suo per septimum problemum. Item numeros polares domorum ad eundem orizontem quibus rebus comprehendis per ea que in principio presentis documenti exposuimus. 12. celi domos artificiose





constitues. Si autem significator patris fuerit in medietate celi occidentali: accepta elevatione poli supra orizontem eius: numerisq; polaribus domorum inuentis ad eundem orizontem: quere descensionem eius obliquam ad orizontem suum. Deinde autem non aliter procede q̃ ante hac de sole precepimus quādo in occidentali orizonte filij ponebatur. Nōdemento tamen exposita hactenus duntaxat veritatem tenere quando significator huiusmodi latitudine prius caret: nam si latitudinem quantūcūq; haberet: inuenta elevatione poli supra circulum positionis sue aut orizontem suum quere punctum cum quo oritur in eodem suo orizonte si fuerit in medietate orientali: aut punctum cum quo occidit in orizonte suo si fuerit in medietate celi occidentali: deinde cum illis punctis ecliptice procedas quemadmodum antea fecisti cum significatore non habente latitudinem. Cū exemplo sit genitura alicuius filij primogeniti. 23. horis 2. 29. minutis a meridie transactis scdm dies equatos in regione habente latitudinem. 48. graduum sole existente in fine. 26. gradus cancri: volo constituere locum solis pro ascendente patris et exinde totam domorum figuram elicere subtraho. 23. horas 2. 29. minuta a. 24. horis remanent. 31. minuta vnius hore que equipolent. 7. gradibus 2. 45. minutis equatoris aut paralleli solis: quare dico solem distare a meridiano versus orientem. 7. gradibus 2. 45. minutis. Declinatio autem solis septentrionalis erit. 21. graduum cum 2. quā predicta distantia solis a meridiano ingredior tabulam positionis ad. 48. gradus latitudinis et secundum documentum. 20. probleumatis inuenio elevationem poli borealis supra circulum positionis solis. 6. graduum: eo autem circulo positionis desinens vtat tanq̃ orizonte regionis habentis latitudinem. 6. graduum. Intro igitur tabellam domorum rationalem cum. 6. gradibus elevationis poli et ex directo eorum inuenio numerum polarem vndecime. 3. graduum: numerum autem polarem duodecime. 5. graduum 2. 11. minutorum quorum vice accipiam. 5. gradus propter breuitatem ascensio obliqua solis ad latitudinem. 6. graduum est. 115. gradus 2. 42. minuta a qua ascensio subtraho. 30. gradus 2. remanent. 85. gradus cum. 42. minutis pro ascensione obliqua duodecime domus patris: item ex ascensione obliqua. 12. minuo. 30. gradus remanent. 55. gradus 2. 42. minuta pro ascensione obliqua vndecime a qua demum subtractis. 30. remanent. 25. gradus cum. 42. minutis pro ascensione recta decime domus. Rursus per continuam additionem trigonorum graduum ad ascensionem obliquam ascendentis scilicet loci solis elicio ascensionem obliquam. 2. domus. 145. graduum 2. 42. minutorum: ascensionem autem obliquam. 3. domus. 17. graduum 2. 42. minutorum. Ex illis autem ascensionibus inuenio cuspides dictarum domorum et q̃q; diametraliter positurus quē admodum in. 14. probleumate traditum est: decime quidem. 27. gradus 2. 41. minuta arietis: vndecime autem. 29. gradus cum. 2. minutis tauri: duodecime. 28. gradus 2. 4. minuta geminorum: secunde. 24. gradus 2. 35. minuta leonis: tertie vero. 25. gradus 2. 24. minuta virginis.

#### Trigesimumquintum Probleuma.

**S**ignificatorum quemlibet ad locum propositum quemcūq; scdm signorum consequentiam artificialiter dirigere. Nusquam ad operationem descenditur: nonnulla vocabula presentis negocij diffinienda sunt. Dirigere non ē aliud q̃ mouere speram donec locus secundus traducitur ad suum primum: id autē tunc accidere ptolomeus clarissimus asserit quando locus secundus perducitur ad circulum in quo iacuit locus primus aut e contra locus primus trāfertur ad circulum in quo ponebatur locus secundus. Circulum dico coincidentem meridiano et orizonti in vtraq;



eorum cōmuni sectione quem superius circulum positionis appellare libuit. Locus autē primus voco eum cuius noticiā prior in mentem venit aut quem dirigere iubeo. Locus vero secundus est is ad quem dirigitur primus: locus primus plerumq; vocari solet significator: quod alicuius rei habitudinem in celo representat: locus autem secundus non iniuria promissor appellabitur quod futurum aliquod accidens siue bonum siue malum portendat. Significator itaq; habet vicem subiecti recepturi aliquid a promissore in certo tēpore cuius quidē temporis quantitatem directio metiri solet quemadmodū iudicib; placet. Directio autem est motus primi mobilis quo videlicet significator traducitur ad situm promissoris aut e contra solet tamen vt plurimum accipi directio pro arcu equatoris qui coascendit vel condescendit intervallo quod est inter significatorem et promissorem respectu circuli positionis: in quo alter eorū iacet: vnde et dirigere tunc dicimur quando huiusmodi arcum docte numerabimus. Supplicem autē directionem distinguere solent astrologi: quāz vna quidem vocatur directio directa in qua videlicet locus secundus id est promissor intelligitur transferri ad situm primi id est significatoris. Dicitur etiam directio scđm signorum successionem. Alia autē vocatur conuersa aut contra successionem signorum in qua locus primus intelligitur transferri ad locum secundum: hac secunda directione vtuntur iudices pro parte fortune ac alijs partibus et pro planetis retrogradis. Quando igitur significator in meridiano constituitur siue supra terrā siue sub terra subtrahē ascensiones eius rectas ab ascensionibus rectis promissoris accomodato integro circulo. 360. graduum si opus fuerit et relinquatur directio significatoris quesita. Si autem fuerit in ascendente minue ascensionem eius obliquam ex ascensione obliqua promissoris: sic enim reliqua manebit directio significatoris quesita: nō aliter operaberis per descensiones si significator fuerit in occidente: subtracta enim descensione obliqua significatoris a descensione obliqua promissoris relinquatur directio quesita. Neq; si significator non fuerit in aliquo dictorum angulorum per. 19. probleuma scias distantia eius ab angulo medij celi si fuerit supra terrā: aut ab angulo terre si sub terra extiterit. Deinde per 20. probleuma eleuationem poli borealis supra orizontem significatoris: aut circuli positionis addiscas: postea ad eandem eleuationē poli cōputa ascensio obliquam significatoris per septimū quidem probleuma si latitudine caruerit significator ipse: per decimum autem si quam habuerit latitudinē similiter ab eadem eleuationē poli ascensio obliqua promissoris inueniatur: demptaq; ascensione obliqua significatoris ex ascensione obliqua promissoris residuum numerabit directionem quesitam. Si autem significator fuerit in parte occidentali celi descensio obliqua significatoris ad eandem eleuationem poli supra circulum positionis accepta: per octauū quidem probleuma si nullam habuerit latitudinem: per vndecimū autem si quam habuerit latitudinem: descensio inquam minueda est ex ascensione obliqua promissoris eodem modo accepta: sic enim relinquatur directio quam querebas. Nulla prorsus exemplari cōputatione hic est opus si ea que circa ascensiones ac descensiones iam dudum monuimus et operati sumus recte didicisti.

Collige simum sextum Probleuma.

**N**o pacto significator quispiam contra signorū successionem dirigendus sit lucubrare. Directio significatoris cuiuspiam contra signorū successionē similis est directioni scđm signorū consequentiam: hoc vno cōsiderato qd ascensiones et descensiones accipiantur scđm positionē promissoris et nō significatoris ac si promissor dirigendus esset ad locū significatoris: sic enim subtrahemus ascensiones rectas promissoris ab ascensionibus rectis significatoris si in meridiano constitutus fuerit



promissor: ascensiones autem obliquas promissoris ad latitudinem regionis sumptas ab ascensionibus obliquis significatoris si promissor in ascendente iacuerit: aut descensionibus huius a descendentibus illius si angulus occidentis tenuerit promissor: et relinquatur directio expectata. Quod si nullus dictorum angulorum promissorem habuerit inuenta prius elevatione poli borealis supra circulum positionis sue subtrahemus ascensiones obliquas ipsius ad eandem poli elevationem sumptas ab ascensionibus obliquis significatoris si in medietate orientali fuerit promissor: aut descensiones eius obliquas a descensionibus obliquis significatoris ad eandem poli elevationem acceptis accomodato integro circulo. 360 graduum quoniam opus fuerit: quod enim relinquatur directionem ostendit quesitam.

Aligesimus septimum Probleuma.

**A**dem locum zodiaci directio significatoris cuiuspiam secundum signorum successionem perueniat in aliquo anno proposito inuestigare. Si in radice natiuitatis vel alterius principij fuerit significator in meridiano siue supra terram siue sub terra ascensionem recte eius adde numerum annorum transactorum ab instanti talis radice id est pro quolibet anno exacto unum gradum equatoris dicte ascensionem recte adicias et aggregati tanquam ascensionem recte quere arcum ecliptice resecto prius integro circulo si opus fuerit: directio enim significatoris memorati in anno sequenti eos annos quorum numerus additus est ascensionem recte prefate perueniet ad gradum qui sequitur in medietate arcus ecliptice iam inuentum. Si autem significator fuerit in ascendente numerum annorum transactorum adde ascensionem oblique significatoris ad regionem propositam: aggregatum enim erit ascensio obliqua cuiusdam arcus ecliptice cui immediate annexitur gradus ad quem perueniet directio. Cum igitur arcus ecliptice per tabulam regionis agnoscas: non aliter operaberis per descensiones significatoris si in occidente extiterit: numero enim annorum adiecto descensionibus obliquis significatoris prodibit descensio obliqua arcus ecliptice terminali ad gradum directionis quesitum. At si significator extra angulos dictos repertus fuerit: cognoscenda est eleuatio poli borealis supra circulum positionis aut orientem eius: deinde ascensionibus obliquis eius ad orientem eundem addatur numerus annorum propositorum: si in medietate orientali manserit significator: aut descensionibus eius in eodem oriente si in occidentali parte celi iacuerit: hoc enim pacto constabis vel ascensionem aliquam: vel descensionem arcus ecliptice quem immediate sequitur gradus directionis quesitus: huiusmodi autem arcum ecliptice per tabulam orientis significatoris seruientem: ac deinde gradum ad quem perueniet directio facile percludes.

Aligesimus octauum Probleuma.

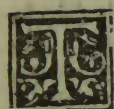
**N**o pertingat directio significatoris propositi contra successionem signorum in anno quocumque explorare. Cognitio prius arcu semidiurno significatoris cum arcu seminocturno per duodecim probleuma: subtrahere numerum annorum exactorum ab ascensione recta significatoris: itemque residuum ab ascensione recta medij celi accomodato integro circulo ubi opus fuerit et relictum numerum ab elongationem significatoris a meridie quam habet dum positio sua similis est positioni promissoris id est gradus quesiti: huiusmodi igitur elongationem si minor fuerit arcu semidiurno significatoris pro distantia a meridiano subterranea occidentali tenebis: si vero maior arcu semidiurno significatoris fuerit: minor tamen semicirculo eam ex semicirculo deme et relinque distantiam significatoris a meridiano subterranea occidentali: at si maior fuerit semicirculo: semicirculus ex ea minuatur et residuum si minus arcu seminocturno extiterit pro distantia a meridiano subterranea orientali computetur: si autem arcum seminocturnum exces-



serit dempto eo ex semicirculo quod relinquetur distantia a meridiano supraterranea orientalis nuncupabitur. Jam igitur cum declinatione significatoris et distantia a meridiano per vigesimum probleuma elevationem poli borealis supra circulum positionis addisce: ac deinde ascensionem obliquam significatoris per septimum quidem probleuma si latitudine caruerit significator: per decimum vero si habuerit latitudinem quemadmodum superius explanatum est. si saltem memorata distantia a meridiano fuerit orientalis: ex hac demum ascensione obliqua minue numerum annorum ab instanti radice transactoris: et residuo tanquam ascensioni oblique congruentem arcum ecliptice elicias per nonum probleuma. Nam ad gradum finalem huius arcus ecliptice perueniet directio significatoris in anno proposito. Si autem sepe nominata distantia a meridiano fuerit occidentalis accipe descensionem obliquam significatoris: per octauum quidem probleuma si latitudine caruerit: per vndecimum autem si latitudinem quantuncumque habuerit: ex qua denique ascensione obliqua minue numerum annorum exactorum a tempore radice usque ad annum propositum exclusiue: et residuum erit ascensio quedam aliqua cui per nonum probleuma arcum ecliptice elicias: nam gradus eius terminalis erit locus directionis quem petebas. **C**um expro habeat pars fortune .25. gradus virginis in genitura cuiusdam hominis ad latitudinem .48. graduum: medium autem celi sit finis .25. graduum et .30. minutorum cancri: volo experiri quonam peruentura sit directio partis fortune in anno vigesimo quinto etatis: inuenio arcum semidiurnum significatoris .92. graduum et .13. minutorum: arcum autem seminocturnum .87. graduum et .47. minutorum. Item ascensionem rectam significatoris .175. graduum et .25. minutorum: ascensionem autem rectam medij celi .117. graduum et .28. minutorum: ex ascensione igitur rectam significatoris dempto .24. gradus pro .24. annis transactis ab instanti geniture et relinquuntur .151. gradus cum .25. minutis quos demum subtraho ascensione recta medij celi: coassumptis .360. gradibus et remanet elongatio significatoris a meridie .326. graduum et .3. minutorum: dum scilicet est in situ promissoris: ex hac demum elongatione minuo .180. gradus relinquitur numerus .146. graduum et .3. minutorum: qui cum sit maior arcu seminocturno necesse est significatorem esse supra terram in quarta orientali: dum videlicet est in circulo positionis promissoris quare subtraho .146. gradus et .3. minuta a semicirculo .180. graduum ut relinquetur distantia significatoris a meridiano dum est in situ promissoris: que quidem distantia erit supraterranea orientalis: significator denique habet declinationem septentrionalem .2. graduum cum qua et predicta distantia eius a meridiano intro tabulam positionum ad .48. gradus latitudinis et directe supra distantiam memoratam in fronte tabule inuenio .31. gradus vnde certior fio quod polus borealis eleuatur .31. gradibus supra circulum positionis aut orientem significatoris dum est in situ promissoris: quare per tabulam ascensionum obliquarum subiectam .31. gradibus computo ascensionem obliquam significatoris .173. graduum et .12. minutorum: ex qua minuo .24. gradus pro .24. annis transactis ab hora geniture relinquuntur .149. gradus cum .12. minutis et tanta est ascensio obliqua loci ad quem perueniet directio cui ascensioni per tabulam .31. graduum elevationis poli respondent .3. gradus et .30. minuta virginis. Directio igitur perueniet in anno vigesimo quinto ad quartum gradum virginis quod erat exponendum.

**C**Uigessimum nonum      **P**robleuma.





Tabulam positionum generalem pro quacunq; latitudine a .35. gradibus ad  
60. inclusiue artificialiter componere; fecimus quattuor huiusmodi tabulas  
positionum particulares: vna quidem pro latitudine .42. graduum: aliam  
pro latitudine .45. tertiam pro latitudine .48. et quartam pro latitudine .51.  
graduum tanq; suffecturas nobis ac alijs viris studiosis artis nostre amatoribus. Quia  
uis autem saltum fecerimus per trinos gradus ita q; binis gradibus proprias  
tabulas non constituerimus licebit tamen vti tabula quapiam: principaliter quidem et  
condigne pro latitudine cui inscribitur: rationabiliter autem et prope verum pro dua-  
bus latitudinibus collateralibus: quarum vna quidem proximo minor est latitudine ta-  
bulam propriam habente: alia autem proximo maiore ea sic tabula latitudinis .42. gra-  
duum inscripta duabus etiam latitudinibus .41. et .43. graduum haud inique accomo-  
dabitur: tabula deniq; pro .51. gradibus contexta .50. et .52. gradibus seruet: non aliter  
de duabus reliquis intelligendum est quo circa ad latitudines .42. graduum conti-  
nue sese sequentium memorate quattuor tabule accomodari poterunt: si tamen preci-  
sius per has etiam quattuor tabulas operari vuleris latitudine tue regionis propriam  
tabulam non habente: accipe primo eleuationem poli supra circulum positionis ve-  
luti iam dudum precepimus per tabulam latitudinis proximo minoris tua latitudine:  
deinde similiter accipe eleuationem huiusmodi per tabulam latitudinis proximo ma-  
ioris: nam tertia pars differentie duarum eleuationum hoc pacto inuentarum vni gra-  
dui latitudinis respondebit: eam itaq; partem semel accipe pro vno gradu superfluo  
vltra numeru latitudinis minoris: bis aut e pro duobus. Si demum minuta iuxta gra-  
dus integros iacuerint: accipe partem proportionalem de tertia parte predicta secun-  
dum proportionem minorum residuorum ad .60. quam adde portioni vnus gradus  
aut duorum iam pridem inuente: aut eam solam tene si nullus gradus sed minuta du-  
taxat vltra latitudinem minorem abundauerint: et habebis portionem respondentem  
superfluo latitudinis tue vltra latitudinem minorem: eam portionem adde eleuationi po-  
li prime si ipsa minor fuerit secunda: aut ab ea subtrahere si ipsa excederit secundam: et re-  
sultabit eleuatio poli supra circulu positionis quam querebas. Quid si operatio talis vel  
scrupulosa vel minus iocunda videtur poteris exarare nouam ac propriam tabulam  
latitudini tue. Huius enim rei gatia tabula positionum generalem conscripsimus a .35.  
gradibus latitudinis incipientem et ad .60. desinentem. Si aut ad latitudinem quapiam in-  
feriorem .35. gradibus aut superiorem .60. gradibus ad ipsum libeat efficere. scdm pro-  
blematu almaie sti consulendus est vbi exactissime docetur quo pacto et generalis posi-  
tionu tabula et particularis componi debeant. In huius aut tabule generalis latere sinistro  
ponuntur numeri eleuationu poli supra circulos positionum: sed in fronte eius latitudi-  
nes regionum a triginta quinq; gradibus vsq; ad sexaginta querende sunt: arca aut ta-  
bule arcus equatoris meridiano et circulis positionum interceptos completitur. Condi-  
turus igitur tabula positionum particularem scribe primo sinistra versus duos ordines  
declinationum: primu quidem declinationis septentrionalis a .32. incipientem ad nihilq;  
desinentem: stella .n. in equatore existens nulla habet declinationem: scdm aut ordine decli-  
nationis meridiane ex vno quidem gradu nascentem et ad .32. finientem. In altero eni ho-  
rum ordinu queri debet declinatio stelle quemadmodu superius traditu est. In capite  
aut et arande tabule scribe numeros eleuationu poli ab vno quidem iniciu sumetes ad la-  
titudinem aut regionis tue desinentes. Deinde intra tabula generale cum eleuatoe poli  
vnus gradus et ex directo eius sub latitudine regiois tue offedas arcu quedam equator



quem adde singulis numeris in tabula differentiarum ascensionum repertis sub elevatione poli unius gradus incipiendo iuxta .32. gradus declinationis et aggregata huiusmodi per ordinem scribe in arca tabule cōtexende sub elevatione poli unius gradus initium videlicet statuendo iuxta .32. gradus declinationis. In fine aut huius ordinis scribe predictum arcum equatoris solitariū. Sic primus ordinem septentrionalē unius gradus ab solutū habebis: postea ab arcu equatoris memorato subtrahere singulas differentias ascensionū predictas incipiendo iuxta declinationē unius gradus. Et residua scribe iterum in arca tabule exarande sub elevatione poli unius gradus: initium sumēdo apud declinationem unius gradus: hoc itaq; pacto primus ordo meridionalis unius gradus cōstituatur. Illo aut aliter procedes ad descriptionē duorum ordinum quos requirit elevatio poli duorum graduum sumpto enim arcu equatoris per tabulam generalē ex directo duorum graduum lateris finistri sub latitudine videlicet regionis tue cum arcum adde singulis differentijs ascensionū sub elevatione poli duorum graduum positus et summas additionū scribe in arca tabule cōponende sub elevationi poli duorum graduum incipiendo iterum apud .32. gradus declinationis septentrionalis: in fine aut huius ordinis arcum equatoris quem addidisti pone solū: sicq; habebis ordinem secundum declinationis septentrionalis. Ex eodem insuper arcu equatoris deme singulas differentias ascensionū predictas sub elevatione poli duorum graduum inuenta: et residua scribe iterum in arca tabule condende sub elevatione poli duorum graduum: incipiendo iuxta declinationē unius gradus hoc etenim precepto secundum ordinem declinationis meridiane cōstitues: pariformiter ceteros ordines et tandem integram tabulam positionū regionis tue absolues. Exemplū aut hic nullum expectandū est cum ante oculos habeas tabulam positionū generalē et quattuor tabulas positionū particulares cōstituere poteris. Absolutem igitur habes artē directionū cuius gratia potissimum hoc scribendi officium assumpsimus. Illic de aspectibus quoq; et radiationibus differendū videtur queres non modo ad directiones pertinet: verum et ad projectiones significatorū quā ob rem prius de projectionibus pauca quedā exponuntur de hinc ad aspectus et radiationes calamum vertemus.

C Trigesimum Problema.

**Q**uo pertingat profectio significatoris cuiuspiam in tempore aliquo dato explorare. Profectio est equalis quedā aut regularis incessio significatoris secundum signorum zodiaci consequentiā. Tripliciter aut proficiscuntur significatores geniture cuiuslibet: uti placet ptoleomeo circa finem quadripartiti sui per annos videlicet menses et dies. In projectione annua unicuique anno solari tribuitur signum unum: et si genitura quepiā habet in ascendente signum arietis: secundus annus habebit signum tauri: tertius signum geminorum et sic consequenter per ordinem annorum et signorum usque ad .12. annum: tertiusdecimus iterum annus habebit arietem. Initia autem annorum sumuntur a reditu solis ad eum locum in quo erat tempore geniture qui ob eam rem anni solares nūcupantur. In principiis vero omnium annorum ac mensium gradus omnium signorum projectionis equalēs esse oportet: unde si tertius arietis ascenderet in genitura quapiā ascendēs proficisceretur ad tertium tauri in secundo anno et ita de ceteris. In projectione aut mensurā unicuique mēsi projectionali datur signum unum ita quod signum projectionis annue sit signum primi mēsis eiusdem anni quāobrem annus solaris in tredecim partes equalēs dividendus est: quarum unaqueque vocabitur mēsis projectionalis. In projectione aut diurne duobus diebus tribus horis et .52. minutis fere datur signum unum ita quod mēsis projectionalis subdividitur in .13. partes equalēs. Sic enim in principiis mensium projectionaliū idem erit ignum mensuræ. De projectione itaq; annua hoc breue accipias diuiso numero annorum

*profectio*  
*mensis*

*13 menses*



transactio:um a tempore geniture per. 12. residuo computato a signo radicias perduceris ad signuꝝ profectionis anni propositu. Quo aut pertingat profectio mensurna ad qdꝫ cumqꝫ tempus propositu in aliquo anno sic intelliges: primo scias quantu tempus effluxerit ab initio anni solaris currentis anni scilicet reuolutionis geniture vsqꝫ ad tempus propositu quod computabis hoc pacto vide quantu tempus p̄terijt ab initio mensis vsualis in quo fit reuolutio natiuitatis vsqꝫ ad principium anni solaris aut reuolutionis ꝛ numeru dieru cum horis ꝛ minutis adde numero dieru reperto iuxta mensum vsuale immediate precedentē in tabella mensum vsualiu. In prima quide si fuerit annus communis. In secunda aut si bisextilis extiterit hoc tēpus serua per totu annum solare. Similiter addisce quantu tempus effluxit ab initio anni romanoꝝ vsqꝫ ad tempus propositum dempto itaqꝫ tēpore prius seruato ꝛ ita nunc tempore inuenito relinque tempus transactum ab initio anni solaris vsqꝫ ad tempus propositu. Illud tempus quere in tabula mensum profectionalium veluti fieri solet quando per mediu motu cuiuscunqꝫ planete queritur tempus ei motui respondens: si enim precise inueneris in tabella predicta dies tuos cum horis ꝛ minutis: linea numerum ostendet numeru mensum profectionalium transactoꝝ ab initio anni solaris currentis. Si aut non inueneris precise apud dies proximo pauciores habebis menses exactos: verutamen dies huiusmodi pauciores demendi sunt ex diebus tuis quos in tabula mittere voluisti ꝛ relinquentur dies superflui cum horis ꝛ minutis: dabis itaqꝫ cuilibet mensi profectionali signu vnum incipiendo a signo profectionis annue: dies autem superfluos cum horis ꝛ minutis mitte in tabulaz profectionis mensurne ꝛ ex directo (vt fieri solet in medijs motibus coputandis) habebis gradus cum minutis addendos signis ꝛ gradibus prius notatis sicqꝫ perduceris ad locum zodiaci quo pueniet profectio in fine totius temporis transacti qꝫ si modo predicto cum diebus superfluis ingressus fueris tabula profectionis diurne: elicies numerum signoz ꝛ graduu computandozꝫ a signo profectionis mensurne vt perducaris ad locum profectionis. **C**lucerna aut si qua suspicio fuerit alicuius futuri accidentis propter corpus vel radium alicuius stelle ꝛ volueris scire quo tempore anni profectio qualiscunqꝫ illuc perueniat. Cognito intervallo zodiaci quod est a principio signi profectionis annue vsqꝫ ad locum suspectu inuenies tempus ei respondens quemadmodu in opere mediorum motuu fieri solet quando medio motui dato tempus suuꝫ computare volumus: qdꝫ multis moroz. **E**xemplari computatione facilius rem hanc intelliges qꝫ longa verborum serie. Sit reuolutio alicuiꝫ natiuitatis. 6. diebus. 5. horis ꝛ. 10. minutis marcij completis annis xpi. 1467. currente locus autem solis tempore geniture fuerit in fine vigesimignti gradus piscium que genitura ponatur fuisse anno xpi. 1438. currete volo inuestigare loca profectionis solis ad. 7. dies iulij completos in anno. 1467. currete. Subtraho. 1438. a. 1467. remanent. 29. anni solares completi quibus diuisis per. 12. relinquitur. 5. sed qntum signum ab ariete est leo. illic ergo scilicet in vigesimo quinto gradu leonis est locus profectionis annue in vltimo dictozꝫ annoꝝ quare in anno trigesimo qui incipit. 65. die 5. hora. 10. minuto marcij profectio pertinet ad. 26. virginis: qꝫ iuxta februarium inuenio 29. dies quibus addo. 6. 5. 10. marcij colligunt. 65. 5. 10. a principio videlicet anni. 1467. ad initium anni solaris trigesimi. Similiter apud inuizꝫ reperio. 181. dies quibus addo 7. dies iulij ꝛ resultant. 188. dies a principio anni. 1467. vsqꝫ ad tempus propositu. Subtraho itaqꝫ. 65. 5. 10. a 188. ꝛ remanent mihi. 122. 18. 50. quos non reperio in tabella mensum profectionalium sed numeru proximo minorem. 112. 10. 28. subtraho a diebꝫ predictis ꝛ relinquitur. 10. 9. 39. 32. vltra quattuor menses profectionales: mensis ergo quintus

q.<sup>u</sup> phngat pro  
f. h. w. sign  
f. i. u. v. i. s. A.  
dum dari

Corp? & cabin



currens habet quintum signum a signo profectionis annue id est capricornum incipiendo a vigesimo sexto gradu eius: postea intro cum diebus superfluis et horis ac minutis horarum accipiendo signa gradus et minuta quemadmodum fieri solet in computationibus meridiorum motuum sic inuenio. 11. 6. 28. quos addo. 25. gradibus capricorni proueniunt. 6. 6. 28. aquarj locus scilicet profectionis mensuræ ad. 7. dies iulij completos. Similiter cum diebus superfluis intro tabulam profectionis diurne et inuenio. 4. 24. 23. 55. computanda a 25. gradibus capricorni et resultatur. 2. 19. 23. 55. profectio igitur diurna conuocans etiam profectionem signorum perueniet in fine. 7. diei iulij ad. 20. graduum geminorum. Ceterum ut loca profectionum habeantur parata ad singulos dies totius anni sic procedo. subtraho. 5. horas. 10. minuta que erant iuxta dies reuolutionis geniture a. 24. horis remanent. 18. 50. quibus intro tabulam profectionis mensuræ in modo supradicto colligo. 0. 50. 16. 28. illud addo. 25. gradibus leonis resultant. 25. 50. 16. leonis hic est locus profectionis mensuræ quam vocant etiam profectiones graduum ad meridiem. 7. diei marcij cui loco addo portionem profectionalem vnius diei que est vnus gradus. 4. minuta et. 4. secunda et proueniunt. 26. 54. 20. leonis locus scilicet profectionis ad meridiem diei octauij marcij et sic consequenter vsq; ad finem totius anni. Similiter cum. 18. 50. 16. 28. minutis per tabulam profectionis diurne inuenio. 10. 53. 34. quos addo. 25. gradibus leonis resultant. 55. 3. 34. virginis locus scilicet profectionis diurne ad meridiem. 7. diei marcij. Deinde per additionem continuam portionis profectionalis diurne que est. 13. 52. 52. loca profectionum diurnarum ad meridies singulorum dierum totius anni constitues quemadmodum autem hucusq; circa solem actum est de reliquis quoq; significatoribus fiet: quoru suz tandem huiusmodi profectiones tendant et quantam habeant efficaciam alibi satis cōtemplaberis.

#### Trigesimum primum Problema.



Aspectibus tandem et radiationibus paucula quedam subiungere et Radiationes a nonnullis perpenduntur secundum equatores circulum quatuordecim diuersimode plerique enim per ascensiones rectas locum radiationis inquirunt siue stella radians in meridiano fuerit siue extra eum in quocumque alio situ: pro radiatione. n. sextili finis sinistra ascensioni recte ipsius stelle addunt. 60. gradus et per ascensionem rectam inde resultantem querunt arcum ecliptice cuius finem dicunt esse locum radiationis pro radiatione autem sextili dextra subtrahunt. 60. gradus ab ascensione recta stelle et cum residuo ut prius querunt arcum ecliptice ad cuius finem radiationem huiusmodi desinere arbitrantur. Non aliter faciunt pre ceteris radiationibus addendo vel minuendo interualla vnicuique radiationi propria. Alij autem exequuntur id negotium per ascensiones quidam rectas stella meridianum tenente: per obliquas autem ascensiones regionis si in oriente extiterit: aut per descensiones si in occidente. In locis autem medijs si reperta fuerit stella radiationes inquirunt per ascensiones promiscuas ac si velint scrutari locum ad quem pertinet directio stelle propositæ. Sunt etiam qui simpliciter considerant radiationes per interualla graduum ecliptice. Ioannes autem blachinus in circulo quodam super eclipticam inclinato et per centrum stelle habentis latitudinem quatuordecim transeunte accipit interualla radiationum aut aspectum cuius quidem circuli polus vterque est in circulo latitudinis stelle: ex quibus denique interuallis loca radiationum in ecliptica elicit. Longum esset particulariter explicare predictos modos ac infirmitatem eorum demonstrare quare alibi abundius de his rebus tractare decretum est. Nunc vero breuiter intelligatur fundamētum nostre opinionis: quolibet stella diffundit radium suum tam luminis quam qualitatis occulte orbiculariter: cum autem infiniti sint tales radij efficaciores deprehensi sunt quattuor

confirmat per  
ad annu

sum significatur  
profectio geniturae

Radus  
dextra  
sinistra

Io. Blachinus?



or quorum vnus quidem est latus sexanguli equilateri inscripti circulo per centrum stel-  
 le transeunt; alius autem latus quadrati; tertius autem latus trianguli equilateri quar-  
 tus vero diameter eiusdem circuli. Quicquid autem hic dicitur de stellis intelligendū  
 quoq; est de punctis zodiaci alijsq; punctis in concauo primi mobilis existentibus sub  
 quibus stelle ipse reperiuntur. Sermo igitur presens sonabit ac si centra omnium stellarū  
 sint in concauo primi mobilis neq; id iniuria cum in eo concauo loca stellarum conside-  
 remus: imaginor itaq; a puncto celi quoptam duci lineam radialem que sit equalis late-  
 ri sexanguli equilateri circulo magno primi mobilis inscripti eamq; circūduci pūcto ra-  
 diante immoto donec ad situm vnde moueri cepit redeat ita tamen q; reliquas linee ter-  
 minus semper adhereat concauo primi mobilis: hoc pacto pūctus terminalis linee me-  
 morate in concauo celi describet circūferentiam circuli que si secat eclipticā eam in duo-  
 bus punctis secat quorum alterum quidem est ad dextram alterū aut ad sinistrā hec duo  
 puncta sunt loca radiationis sextilis per excellentiam quandam: q̄uis etiam ad oē pun-  
 ctum circūferentie descripte radius dictus sextilis terminetur. Similiter intelligendum  
 est de linea radiationis quadrate ac radiationis triangularis. Cum ergo scire volueris lo-  
 cum radiationis sextilis planeta habente latitudinem intra tabellam radiorum cum lati-  
 tudine planete ⁊ ex directo eius inuenies arcum quandam ecliptice computādum a lo-  
 co longitudinis planete scdm successionē quidem signorum pro radiatione sinistra: con-  
 tra successionem aut pro radiatione dextra: cum deniq; arcum minue ex. 180. gradibus ⁊  
 residuum numera a loco longitudinis planete vtrunq; pro radiatione triangulari. Loc-  
 autem radiationis quadrate semper distat a loco longitudinis planete per quadrantem  
 ecliptice. Radiatio demū opposita ad terminū diametri desinit. De radiationibus itaq;  
 ac aspectibus pauca quedā recensere ac tandem presenti negotio finē libuit iponere.

No. 10

Canon

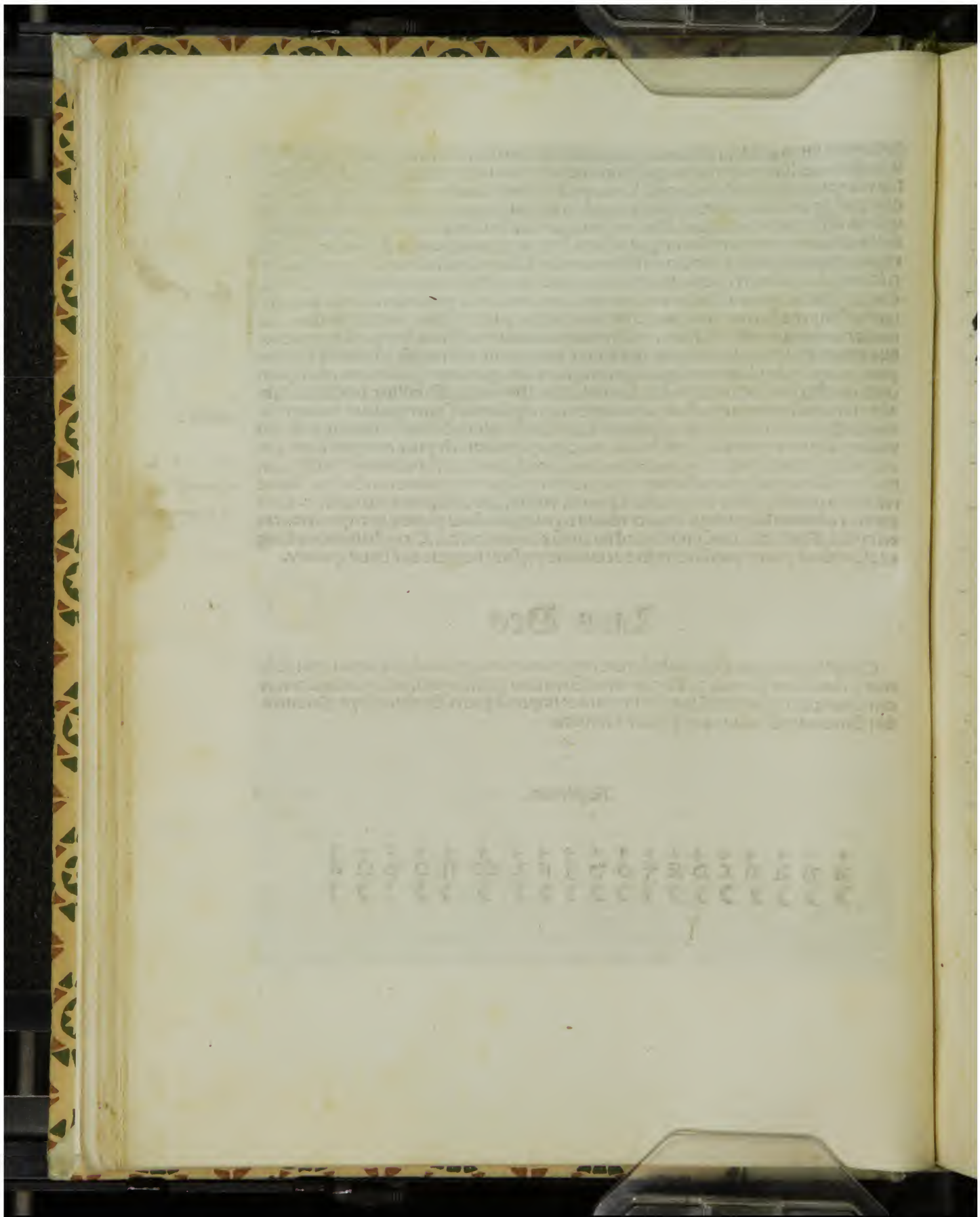
Confirmit in  
 diatoni in  
 Rodinro

## Laus Deo

Cōfinit preclarum Opus tabularum directionum vna cum tabella sinus recti: Edi-  
 tum a clarissimo Joanne de Regiomonte Germano q̄ diligentissime emendatum atq;  
 correctum: Et impressum Cenetis ingenio ac impensa Petri Ziechtensteyn Colonien-  
 sis: Anno natalis dñi. 1504. Idibus februarij.

### Registrum.

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 |
| A | B | A | B | C | D | E | F | G | H | I | K | L | M | N | O | P | Q |
| ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) | ) |





# Tabule Directionū

profectionūq; famosissimi viri Magistri Joannis  
Germani de Regio monte in Natiuitati-  
bus multum vtilis: Una cum  
Tabella finis recti.

# Tabula

*Lat:*

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |       |    |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 8                        | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     |       |       |    |
| S                        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S  |
| 0                        | 31 30 | 30 30 | 29 30 | 28 30 | 27 30 | 26 30 | 25 30 | 24 30 | 23 30 | 22 30 | 30 |
| 1                        | 31 30 | 30 30 | 29 30 | 28 30 | 27 30 | 26 30 | 25 30 | 24 30 | 23 30 | 22 30 | 29 |
| 2                        | 31 29 | 30 29 | 29 29 | 28 29 | 27 29 | 26 29 | 25 29 | 24 29 | 23 29 | 22 29 | 28 |
| 3                        | 31 28 | 30 28 | 29 28 | 28 28 | 27 28 | 26 28 | 25 28 | 24 28 | 23 28 | 22 28 | 27 |
| 4                        | 31 26 | 30 26 | 29 26 | 28 26 | 27 26 | 26 26 | 25 26 | 24 26 | 23 26 | 22 26 | 26 |
| 5                        | 31 24 | 30 24 | 29 24 | 28 24 | 27 24 | 26 24 | 25 24 | 24 24 | 23 24 | 22 24 | 25 |
| 6                        | 31 21 | 30 21 | 29 21 | 28 21 | 27 21 | 26 21 | 25 21 | 24 21 | 23 21 | 22 21 | 24 |
| 7                        | 31 18 | 30 18 | 29 18 | 28 18 | 27 18 | 26 18 | 25 18 | 24 18 | 23 18 | 22 18 | 23 |
| 8                        | 31 15 | 30 15 | 29 15 | 28 15 | 27 15 | 26 15 | 25 15 | 24 15 | 23 15 | 22 15 | 22 |
| 9                        | 31 11 | 30 11 | 29 11 | 28 11 | 27 11 | 26 11 | 25 11 | 24 11 | 23 11 | 22 11 | 21 |
| 10                       | 31 6  | 30 6  | 29 6  | 28 6  | 27 6  | 26 6  | 25 6  | 24 6  | 23 6  | 22 6  | 20 |
| 11                       | 31 1  | 30 1  | 29 1  | 28 1  | 27 1  | 26 1  | 25 1  | 24 1  | 23 1  | 22 1  | 19 |
| 12                       | 30 55 | 29 55 | 28 55 | 27 55 | 26 55 | 25 55 | 24 55 | 23 55 | 22 55 | 21 55 | 18 |
| 13                       | 30 49 | 29 49 | 28 49 | 27 49 | 26 49 | 25 49 | 24 49 | 23 49 | 22 49 | 21 49 | 17 |
| 14                       | 30 43 | 29 43 | 28 43 | 27 43 | 26 43 | 25 43 | 24 43 | 23 43 | 22 43 | 21 43 | 16 |
| 15                       | 30 36 | 29 36 | 28 36 | 27 36 | 26 36 | 25 36 | 24 36 | 23 36 | 22 36 | 21 36 | 15 |
| 16                       | 30 29 | 29 29 | 28 29 | 27 29 | 26 29 | 25 29 | 24 29 | 23 29 | 22 29 | 21 29 | 14 |
| 17                       | 30 21 | 29 21 | 28 21 | 27 21 | 26 21 | 25 21 | 24 21 | 23 21 | 22 21 | 21 21 | 13 |
| 18                       | 30 13 | 29 13 | 28 13 | 27 13 | 26 13 | 25 13 | 24 13 | 23 13 | 22 13 | 21 13 | 12 |
| 19                       | 30 4  | 29 4  | 28 4  | 27 4  | 26 4  | 25 4  | 24 4  | 23 4  | 22 4  | 21 4  | 11 |
| 20                       | 29 55 | 28 55 | 27 55 | 26 55 | 25 55 | 24 55 | 23 55 | 22 55 | 21 55 | 20 55 | 10 |
| 21                       | 29 46 | 28 46 | 27 46 | 26 46 | 25 46 | 24 46 | 23 46 | 22 46 | 21 46 | 20 46 | 9  |
| 22                       | 29 36 | 28 36 | 27 36 | 26 36 | 25 36 | 24 36 | 23 36 | 22 36 | 21 36 | 20 36 | 8  |
| 23                       | 29 25 | 28 25 | 27 25 | 26 25 | 25 25 | 24 25 | 23 25 | 22 25 | 21 25 | 20 25 | 7  |
| 24                       | 29 14 | 28 14 | 27 14 | 26 14 | 25 14 | 24 14 | 23 14 | 22 14 | 21 14 | 20 14 | 6  |
| 25                       | 29 3  | 28 3  | 27 3  | 26 3  | 25 3  | 24 3  | 23 3  | 22 3  | 21 3  | 20 3  | 5  |
| 26                       | 28 51 | 27 51 | 26 51 | 25 51 | 24 51 | 23 51 | 22 51 | 21 51 | 20 51 | 19 51 | 4  |
| 27                       | 28 39 | 27 39 | 26 39 | 25 39 | 24 39 | 23 39 | 22 39 | 21 39 | 20 39 | 19 39 | 3  |
| 28                       | 28 26 | 27 26 | 26 26 | 25 26 | 24 26 | 23 26 | 22 26 | 21 26 | 20 26 | 19 26 | 2  |
| 29                       | 28 13 | 27 13 | 26 13 | 25 13 | 24 13 | 23 13 | 22 13 | 21 13 | 20 13 | 19 13 | 1  |
| 30                       | 28 0  | 27 0  | 26 0  | 25 0  | 24 0  | 23 0  | 22 0  | 21 0  | 20 0  | 19 0  | 0  |



## Declinationum

|    |       | Latitudo Meridiana |       |       |       |       |       |       |       |       |       |       |       |       |      |      |    |   |
|----|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|----|---|
| Gr | 0     | 1                  |       | 2     |       | 3     |       | 4     |       | 5     |       | 6     |       | 7     |      | 8    |    | π |
| B  | B m   | B m                | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m  | B m  | B  |   |
| 0  | 23 30 | 22 30              | 21 30 | 20 30 | 19 30 | 18 30 | 17 30 | 16 30 | 15 30 | 14 30 | 13 30 | 12 30 | 11 30 | 10 30 | 9 30 | 8 30 | 30 |   |
| 1  | 23 30 | 22 30              | 21 30 | 20 30 | 19 30 | 18 30 | 17 30 | 16 30 | 15 30 | 14 30 | 13 30 | 12 30 | 11 30 | 10 30 | 9 30 | 8 30 | 29 |   |
| 2  | 23 29 | 22 29              | 21 29 | 20 29 | 19 29 | 18 29 | 17 29 | 16 29 | 15 29 | 14 29 | 13 29 | 12 29 | 11 29 | 10 29 | 9 29 | 8 29 | 28 |   |
| 3  | 23 28 | 22 28              | 21 28 | 20 28 | 19 28 | 18 28 | 17 28 | 16 28 | 15 28 | 14 28 | 13 28 | 12 28 | 11 28 | 10 28 | 9 28 | 8 28 | 27 |   |
| 4  | 23 26 | 22 26              | 21 26 | 20 26 | 19 26 | 18 26 | 17 26 | 16 26 | 15 26 | 14 26 | 13 26 | 12 26 | 11 26 | 10 26 | 9 26 | 8 26 | 26 |   |
| 5  | 23 24 | 22 24              | 21 24 | 20 24 | 19 24 | 18 24 | 17 24 | 16 24 | 15 24 | 14 24 | 13 24 | 12 24 | 11 24 | 10 24 | 9 24 | 8 24 | 25 |   |
| 6  | 23 22 | 22 22              | 21 22 | 20 22 | 19 22 | 18 22 | 17 22 | 16 22 | 15 22 | 14 22 | 13 22 | 12 22 | 11 22 | 10 22 | 9 22 | 8 22 | 24 |   |
| 7  | 23 19 | 22 19              | 21 19 | 20 19 | 19 19 | 18 19 | 17 19 | 16 19 | 15 19 | 14 19 | 13 19 | 12 19 | 11 19 | 10 19 | 9 19 | 8 19 | 23 |   |
| 8  | 23 15 | 22 15              | 21 16 | 20 16 | 19 16 | 18 16 | 17 16 | 16 16 | 15 16 | 14 16 | 13 16 | 12 16 | 11 16 | 10 16 | 9 16 | 8 16 | 22 |   |
| 9  | 23 12 | 22 12              | 21 12 | 20 13 | 19 13 | 18 13 | 17 13 | 16 13 | 15 13 | 14 13 | 13 13 | 12 13 | 11 13 | 10 13 | 9 13 | 8 13 | 21 |   |
| 10 | 23 7  | 22 7               | 21 7  | 20 8  | 19 8  | 18 8  | 17 8  | 16 9  | 15 9  | 14 9  | 13 9  | 12 9  | 11 9  | 10 9  | 9 9  | 8 9  | 20 |   |
| 11 | 23 3  | 22 2               | 21 2  | 20 3  | 19 3  | 18 3  | 17 3  | 16 4  | 15 4  | 14 4  | 13 4  | 12 4  | 11 4  | 10 4  | 9 4  | 8 4  | 19 |   |
| 12 | 22 57 | 21 57              | 20 57 | 19 58 | 18 58 | 17 58 | 16 58 | 15 59 | 14 50 | 13 50 | 12 50 | 11 50 | 10 50 | 9 50  | 8 50 | 7 50 | 18 |   |
| 13 | 22 52 | 21 52              | 20 52 | 19 52 | 18 53 | 17 53 | 16 53 | 15 54 | 14 54 | 13 54 | 12 54 | 11 54 | 10 54 | 9 54  | 8 54 | 7 54 | 17 |   |
| 14 | 22 46 | 21 46              | 20 46 | 19 46 | 18 47 | 17 47 | 16 47 | 15 48 | 14 48 | 13 48 | 12 48 | 11 48 | 10 48 | 9 48  | 8 48 | 7 48 | 16 |   |
| 15 | 22 39 | 21 40              | 20 40 | 19 40 | 18 41 | 17 41 | 16 41 | 15 42 | 14 42 | 13 42 | 12 42 | 11 42 | 10 42 | 9 42  | 8 42 | 7 42 | 15 |   |
| 16 | 22 32 | 21 33              | 20 33 | 19 33 | 18 34 | 17 34 | 16 34 | 15 35 | 14 35 | 13 35 | 12 35 | 11 35 | 10 35 | 9 35  | 8 35 | 7 35 | 14 |   |
| 17 | 22 25 | 21 26              | 20 26 | 19 26 | 18 27 | 17 27 | 16 27 | 15 28 | 14 28 | 13 28 | 12 28 | 11 28 | 10 28 | 9 28  | 8 28 | 7 28 | 13 |   |
| 18 | 22 17 | 21 18              | 20 18 | 19 19 | 18 19 | 17 20 | 16 20 | 15 21 | 14 21 | 13 21 | 12 21 | 11 21 | 10 21 | 9 21  | 8 21 | 7 21 | 12 |   |
| 19 | 22 9  | 21 10              | 20 10 | 19 11 | 18 11 | 17 12 | 16 12 | 15 13 | 14 13 | 13 13 | 12 13 | 11 13 | 10 13 | 9 13  | 8 13 | 7 13 | 11 |   |
| 20 | 22 0  | 21 1               | 20 2  | 19 3  | 18 3  | 17 4  | 16 4  | 15 5  | 14 5  | 13 5  | 12 5  | 11 5  | 10 5  | 9 5   | 8 5  | 7 5  | 10 |   |
| 21 | 21 51 | 20 52              | 19 53 | 18 54 | 17 55 | 16 55 | 15 56 | 14 56 | 13 57 | 12 57 | 11 57 | 10 57 | 9 57  | 8 57  | 7 57 | 6 57 | 9  |   |
| 22 | 21 42 | 20 43              | 19 44 | 18 45 | 17 46 | 16 46 | 15 47 | 14 47 | 13 48 | 12 48 | 11 48 | 10 48 | 9 48  | 8 48  | 7 48 | 6 48 | 8  |   |
| 23 | 21 32 | 20 33              | 19 34 | 18 35 | 17 36 | 16 36 | 15 37 | 14 38 | 13 39 | 12 39 | 11 39 | 10 39 | 9 39  | 8 39  | 7 39 | 6 39 | 7  |   |
| 24 | 21 22 | 20 23              | 19 24 | 18 25 | 17 26 | 16 26 | 15 27 | 14 28 | 13 29 | 12 29 | 11 29 | 10 29 | 9 29  | 8 29  | 7 29 | 6 29 | 6  |   |
| 25 | 21 11 | 20 12              | 19 13 | 18 14 | 17 15 | 16 16 | 15 17 | 14 18 | 13 19 | 12 19 | 11 19 | 10 19 | 9 19  | 8 19  | 7 19 | 6 19 | 5  |   |
| 26 | 21 0  | 20 1               | 19 2  | 18 3  | 17 4  | 16 6  | 15 7  | 14 8  | 13 9  | 12 9  | 11 9  | 10 9  | 9 9   | 8 9   | 7 9  | 6 9  | 4  |   |
| 27 | 20 49 | 19 50              | 18 51 | 17 52 | 16 53 | 15 55 | 14 56 | 13 57 | 12 58 | 11 58 | 10 58 | 9 58  | 8 58  | 7 58  | 6 58 | 5 58 | 3  |   |
| 28 | 20 37 | 19 38              | 18 39 | 17 40 | 16 41 | 15 43 | 14 44 | 13 45 | 12 47 | 11 47 | 10 47 | 9 47  | 8 47  | 7 47  | 6 47 | 5 47 | 2  |   |
| 29 | 20 25 | 19 26              | 18 27 | 17 28 | 16 29 | 15 31 | 14 32 | 13 33 | 12 35 | 11 35 | 10 35 | 9 35  | 8 35  | 7 35  | 6 35 | 5 35 | 1  |   |
| 30 | 20 12 | 19 13              | 18 15 | 17 16 | 16 17 | 15 19 | 14 20 | 13 21 | 12 23 | 11 23 | 10 23 | 9 23  | 8 23  | 7 23  | 6 23 | 5 23 | 0  |   |



# Reidna para

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 8                        | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     | 8     | 7     | 6     |
| 8                        | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     | 8     | 7     | 6     |
| 0                        | 28 0  | 27 2  | 26 3  | 25 5  | 24 6  | 23 8  | 22 9  | 21 11 | 20 12 | 19 13 | 18 14 |
| 1                        | 27 46 | 26 48 | 25 50 | 24 52 | 23 53 | 22 55 | 21 56 | 20 58 | 19 59 | 18 60 | 17 61 |
| 2                        | 27 32 | 26 34 | 25 36 | 24 38 | 23 39 | 22 41 | 21 43 | 20 44 | 19 46 | 18 47 | 17 48 |
| 3                        | 27 18 | 26 20 | 25 22 | 24 24 | 23 25 | 22 27 | 21 29 | 20 30 | 19 32 | 18 33 | 17 34 |
| 4                        | 27 4  | 26 6  | 25 8  | 24 10 | 23 11 | 22 13 | 21 15 | 20 16 | 19 18 | 18 19 | 17 20 |
| 5                        | 26 49 | 25 51 | 24 53 | 23 55 | 22 57 | 21 59 | 20 60 | 19 61 | 18 62 | 17 63 | 16 64 |
| 6                        | 26 34 | 25 36 | 24 38 | 23 40 | 22 42 | 21 44 | 20 46 | 19 48 | 18 49 | 17 50 | 16 51 |
| 7                        | 26 18 | 25 20 | 24 22 | 23 24 | 22 26 | 21 28 | 20 31 | 19 33 | 18 34 | 17 35 | 16 36 |
| 8                        | 26 2  | 25 4  | 24 6  | 23 8  | 22 10 | 21 12 | 20 15 | 19 17 | 18 19 | 17 20 | 16 21 |
| 9                        | 25 45 | 24 47 | 23 50 | 22 52 | 21 54 | 20 56 | 19 59 | 18 60 | 17 61 | 16 62 | 15 63 |
| 10                       | 25 28 | 24 30 | 23 33 | 22 36 | 21 38 | 20 40 | 19 43 | 18 45 | 17 47 | 16 48 | 15 49 |
| 11                       | 25 11 | 24 13 | 23 16 | 22 19 | 21 21 | 20 24 | 19 26 | 18 28 | 17 31 | 16 33 | 15 35 |
| 12                       | 24 54 | 23 56 | 22 59 | 22 2  | 21 4  | 20 7  | 19 9  | 18 11 | 17 14 | 16 16 | 15 18 |
| 13                       | 24 36 | 23 39 | 22 42 | 21 45 | 20 47 | 19 50 | 18 52 | 17 54 | 16 57 | 15 59 | 14 61 |
| 14                       | 24 18 | 23 21 | 22 24 | 21 27 | 20 29 | 19 32 | 18 35 | 17 37 | 16 40 | 15 42 | 14 44 |
| 15                       | 24 0  | 23 3  | 22 6  | 21 9  | 20 11 | 19 14 | 18 17 | 17 20 | 16 23 | 15 25 | 14 27 |
| 16                       | 23 42 | 22 45 | 21 48 | 20 51 | 19 53 | 18 56 | 17 59 | 16 61 | 15 63 | 14 65 | 13 67 |
| 17                       | 23 23 | 22 26 | 21 29 | 20 32 | 19 35 | 18 38 | 17 41 | 16 44 | 15 47 | 14 49 | 13 51 |
| 18                       | 23 4  | 22 7  | 21 10 | 20 13 | 19 16 | 18 19 | 17 22 | 16 25 | 15 28 | 14 30 | 13 32 |
| 19                       | 22 45 | 21 48 | 20 51 | 19 54 | 18 57 | 17 60 | 16 63 | 15 65 | 14 67 | 13 69 | 12 71 |
| 20                       | 22 25 | 21 29 | 20 32 | 19 35 | 18 38 | 17 41 | 16 44 | 15 48 | 14 51 | 13 53 | 12 55 |
| 21                       | 22 5  | 21 9  | 20 12 | 19 16 | 18 19 | 17 22 | 16 25 | 15 29 | 14 32 | 13 34 | 12 36 |
| 22                       | 21 45 | 20 49 | 19 52 | 18 56 | 17 59 | 16 62 | 15 65 | 14 68 | 13 71 | 12 73 | 11 75 |
| 23                       | 21 25 | 20 29 | 19 32 | 18 36 | 17 39 | 16 43 | 15 46 | 14 50 | 13 53 | 12 56 | 11 58 |
| 24                       | 21 5  | 20 9  | 19 12 | 18 16 | 17 19 | 16 23 | 15 26 | 14 30 | 13 33 | 12 36 | 11 38 |
| 25                       | 20 44 | 19 48 | 18 52 | 17 56 | 16 59 | 15 63 | 14 66 | 13 69 | 12 72 | 11 74 | 10 76 |
| 26                       | 20 23 | 19 27 | 18 31 | 17 35 | 16 38 | 15 42 | 14 46 | 13 50 | 12 53 | 11 56 | 10 58 |
| 27                       | 20 2  | 19 6  | 18 10 | 17 14 | 16 17 | 15 21 | 14 25 | 13 29 | 12 32 | 11 35 | 10 37 |
| 28                       | 19 41 | 18 45 | 17 49 | 16 53 | 15 56 | 14 60 | 13 63 | 12 67 | 11 70 | 10 72 | 9 74  |
| 29                       | 19 20 | 18 24 | 17 28 | 16 32 | 15 35 | 14 39 | 13 43 | 12 47 | 11 50 | 10 53 | 9 55  |
| 30                       | 18 58 | 18 2  | 17 6  | 16 10 | 15 14 | 14 18 | 13 22 | 12 26 | 11 30 | 10 33 | 9 35  |



# Tabule Declinationum

| Latitudo Meridiana |       |       |       |       |       |       |       |       |       |    |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| Q                  | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9  |
| S                  | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S  |
| 0                  | 20 12 | 19 13 | 18 15 | 17 16 | 16 17 | 15 19 | 14 20 | 13 21 | 12 23 | 30 |
| 1                  | 19 59 | 19 0  | 18 2  | 17 3  | 16 4  | 15 6  | 14 7  | 13 9  | 12 11 | 29 |
| 2                  | 19 46 | 18 47 | 17 49 | 16 50 | 15 51 | 14 53 | 13 54 | 12 56 | 11 58 | 28 |
| 3                  | 19 32 | 18 34 | 17 35 | 16 37 | 15 38 | 14 40 | 13 41 | 12 43 | 11 45 | 27 |
| 4                  | 19 18 | 18 20 | 17 21 | 16 23 | 15 25 | 14 26 | 13 28 | 12 30 | 11 32 | 26 |
| 5                  | 19 4  | 18 6  | 17 7  | 16 9  | 15 11 | 14 12 | 13 14 | 12 16 | 11 18 | 25 |
| 6                  | 18 49 | 17 51 | 16 53 | 15 55 | 14 57 | 13 58 | 13 0  | 12 2  | 11 4  | 24 |
| 7                  | 18 34 | 17 37 | 16 38 | 15 40 | 14 42 | 13 43 | 12 45 | 11 47 | 10 49 | 23 |
| 8                  | 18 19 | 17 21 | 16 23 | 15 25 | 14 27 | 13 28 | 12 30 | 11 32 | 10 34 | 22 |
| 9                  | 18 3  | 17 5  | 16 7  | 15 9  | 14 11 | 13 13 | 12 15 | 11 17 | 10 19 | 21 |
| 10                 | 17 47 | 16 49 | 15 51 | 14 53 | 13 55 | 12 57 | 12 0  | 11 2  | 10 4  | 20 |
| 11                 | 17 31 | 16 33 | 15 35 | 14 37 | 13 39 | 12 41 | 11 44 | 10 46 | 9 48  | 19 |
| 12                 | 17 14 | 16 16 | 15 19 | 14 21 | 13 23 | 12 25 | 11 28 | 10 30 | 9 32  | 18 |
| 13                 | 16 57 | 15 59 | 15 2  | 14 4  | 13 7  | 12 9  | 11 12 | 10 14 | 9 16  | 17 |
| 14                 | 16 40 | 15 42 | 14 45 | 13 47 | 12 50 | 11 52 | 10 55 | 9 57  | 9 0   | 16 |
| 15                 | 16 23 | 15 25 | 14 27 | 13 30 | 12 33 | 11 35 | 10 38 | 9 40  | 8 43  | 15 |
| 16                 | 16 5  | 15 7  | 14 10 | 13 13 | 12 16 | 11 18 | 10 21 | 9 23  | 8 26  | 14 |
| 17                 | 15 47 | 14 49 | 13 52 | 12 55 | 11 58 | 11 0  | 10 3  | 9 6   | 8 9   | 13 |
| 18                 | 15 28 | 14 31 | 13 34 | 12 37 | 11 40 | 10 42 | 9 45  | 8 48  | 7 51  | 12 |
| 19                 | 15 10 | 14 13 | 13 16 | 12 19 | 11 22 | 10 24 | 9 27  | 8 30  | 7 33  | 11 |
| 20                 | 14 51 | 13 54 | 12 57 | 12 0  | 11 3  | 10 6  | 9 9   | 8 12  | 7 15  | 10 |
| 21                 | 14 32 | 13 35 | 12 38 | 11 41 | 10 44 | 9 47  | 8 50  | 7 53  | 7 56  | 9  |
| 22                 | 14 13 | 13 16 | 12 19 | 11 22 | 10 25 | 9 28  | 8 31  | 7 34  | 6 38  | 8  |
| 23                 | 13 53 | 12 57 | 12 0  | 11 3  | 10 6  | 9 9   | 8 12  | 7 15  | 6 19  | 7  |
| 24                 | 13 33 | 12 37 | 11 40 | 10 43 | 9 47  | 8 50  | 7 53  | 6 56  | 6 0   | 6  |
| 25                 | 13 13 | 12 17 | 11 20 | 10 23 | 9 27  | 8 30  | 7 34  | 6 37  | 5 41  | 5  |
| 26                 | 12 53 | 11 57 | 11 0  | 10 3  | 9 7   | 8 10  | 7 14  | 6 17  | 5 21  | 4  |
| 27                 | 12 33 | 11 36 | 10 39 | 9 43  | 8 47  | 7 50  | 6 54  | 5 57  | 5 1   | 3  |
| 28                 | 12 12 | 11 16 | 10 19 | 9 23  | 8 27  | 7 30  | 6 34  | 5 37  | 4 41  | 2  |
| 29                 | 11 51 | 10 55 | 9 59  | 9 3   | 8 6   | 7 10  | 6 14  | 5 17  | 4 21  | 1  |
| 30                 | 11 30 | 10 34 | 9 38  | 8 42  | 7 45  | 6 49  | 5 53  | 4 56  | 4 0   | 0  |

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# Residua pars

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |    |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| np                       | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     | v  |
| S                        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S  |
| 0                        | 18 58 | 18 2  | 17 6  | 16 10 | 15 14 | 14 18 | 13 22 | 12 26 | 11 30 | 30 |
| 1                        | 18 34 | 17 41 | 16 45 | 15 49 | 14 53 | 13 57 | 13 1  | 12 5  | 11 9  | 29 |
| 2                        | 18 12 | 17 19 | 16 23 | 15 27 | 14 31 | 13 35 | 12 40 | 11 44 | 10 47 | 28 |
| 3                        | 17 52 | 16 57 | 16 1  | 15 5  | 14 9  | 13 13 | 12 18 | 11 22 | 10 26 | 27 |
| 4                        | 17 30 | 16 35 | 15 39 | 14 43 | 13 47 | 12 51 | 11 56 | 11 0  | 10 4  | 26 |
| 5                        | 17 8  | 16 13 | 15 17 | 14 21 | 13 25 | 12 29 | 11 34 | 10 38 | 9 42  | 25 |
| 6                        | 16 45 | 15 50 | 14 54 | 13 59 | 13 3  | 12 7  | 11 12 | 10 16 | 9 20  | 24 |
| 7                        | 16 22 | 15 27 | 14 32 | 13 36 | 12 41 | 11 45 | 10 50 | 9 54  | 8 58  | 23 |
| 8                        | 15 59 | 15 4  | 14 9  | 13 13 | 12 18 | 11 22 | 10 27 | 9 31  | 8 35  | 22 |
| 9                        | 15 36 | 14 41 | 13 46 | 12 50 | 11 55 | 10 59 | 10 4  | 9 8   | 8 13  | 21 |
| 10                       | 15 13 | 14 18 | 13 23 | 12 28 | 11 32 | 10 37 | 9 41  | 8 46  | 7 50  | 20 |
| 11                       | 14 50 | 13 55 | 13 0  | 12 5  | 11 9  | 10 14 | 9 18  | 8 23  | 7 28  | 19 |
| 12                       | 14 27 | 13 32 | 12 37 | 11 42 | 10 46 | 9 51  | 8 55  | 8 0   | 7 5   | 18 |
| 13                       | 14 4  | 13 9  | 12 14 | 11 19 | 10 23 | 9 28  | 8 32  | 7 37  | 6 42  | 17 |
| 14                       | 13 41 | 12 46 | 11 51 | 10 56 | 10 0  | 9 5   | 8 9   | 7 14  | 6 19  | 16 |
| 15                       | 13 17 | 12 22 | 11 27 | 10 32 | 9 36  | 8 41  | 7 46  | 6 51  | 5 55  | 15 |
| 16                       | 12 53 | 11 59 | 11 4  | 10 9  | 9 13  | 8 18  | 7 23  | 6 28  | 5 32  | 14 |
| 17                       | 12 30 | 11 35 | 10 40 | 9 45  | 8 50  | 7 55  | 7 0   | 6 5   | 5 9   | 13 |
| 18                       | 12 6  | 11 11 | 10 16 | 9 28  | 8 26  | 7 31  | 6 36  | 5 41  | 4 45  | 12 |
| 19                       | 11 43 | 10 48 | 9 53  | 8 51  | 8 3   | 7 7   | 6 12  | 5 17  | 4 22  | 11 |
| 20                       | 11 19 | 10 24 | 9 29  | 8 34  | 7 39  | 6 43  | 5 48  | 4 53  | 3 58  | 10 |
| 21                       | 10 55 | 10 0  | 9 5   | 8 10  | 7 15  | 6 19  | 5 24  | 4 29  | 3 35  | 9  |
| 22                       | 10 31 | 9 36  | 8 41  | 7 46  | 6 51  | 5 56  | 5 1   | 4 6   | 3 11  | 8  |
| 23                       | 10 7  | 9 12  | 8 17  | 7 22  | 6 27  | 5 32  | 4 37  | 3 42  | 2 47  | 7  |
| 24                       | 9 43  | 8 48  | 7 53  | 6 58  | 6 3   | 5 8   | 4 13  | 3 18  | 2 23  | 6  |
| 25                       | 9 19  | 8 24  | 7 30  | 6 35  | 5 40  | 4 45  | 3 50  | 2 55  | 2 0   | 5  |
| 26                       | 8 55  | 8 0   | 7 6   | 6 11  | 5 16  | 4 21  | 3 26  | 2 31  | 1 36  | 4  |
| 27                       | 8 31  | 7 35  | 6 42  | 5 47  | 4 52  | 3 57  | 3 2   | 2 7   | 1 12  | 3  |
| 28                       | 8 8   | 7 12  | 6 18  | 5 23  | 4 28  | 3 33  | 2 38  | 1 43  | 0 48  | 2  |
| 29                       | 7 44  | 6 49  | 5 54  | 4 59  | 4 4   | 3 9   | 2 14  | 1 19  | 0 24  | 1  |
| 30                       | 7 20  | 6 25  | 5 30  | 4 35  | 3 40  | 2 45  | 1 50  | 0 55  | 0 0   | 0  |



# Tabule Declinationum

| Latitudo Meridiana |       |       |      |      |      |      |      |      |      |     |    |
|--------------------|-------|-------|------|------|------|------|------|------|------|-----|----|
| np                 | 0     | 1     | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9   | Y  |
| S                  | S m   | S m   | S m  | S m  | S m  | S m  | S m  | S m  | S m  | S m | S  |
| 0                  | 11 30 | 10 34 | 9 38 | 8 42 | 7 45 | 6 49 | 5 53 | 4 56 | 4 0  | 3 0 | 30 |
| 1                  | 11 9  | 10 13 | 9 17 | 8 21 | 7 24 | 6 28 | 5 32 | 4 36 | 3 40 | 2 9 | 29 |
| 2                  | 10 47 | 9 52  | 8 56 | 8 0  | 7 3  | 6 7  | 5 11 | 4 15 | 3 19 | 2 8 | 28 |
| 3                  | 10 26 | 9 30  | 8 34 | 7 38 | 6 42 | 5 46 | 4 50 | 3 54 | 2 58 | 2 7 | 27 |
| 4                  | 10 4  | 9 8   | 8 13 | 7 17 | 6 21 | 5 25 | 4 29 | 3 33 | 2 37 | 2 6 | 26 |
| 5                  | 9 42  | 8 46  | 7 51 | 6 55 | 5 59 | 5 3  | 4 7  | 3 11 | 2 16 | 2 5 | 25 |
| 6                  | 9 20  | 8 24  | 7 29 | 6 33 | 5 37 | 4 41 | 3 45 | 2 49 | 1 54 | 2 4 | 24 |
| 7                  | 8 58  | 8 2   | 7 7  | 6 11 | 5 15 | 4 19 | 3 23 | 2 27 | 1 32 | 2 3 | 23 |
| 8                  | 8 35  | 7 40  | 6 44 | 5 49 | 4 53 | 3 57 | 3 1  | 2 5  | 1 10 | 2 2 | 22 |
| 9                  | 8 13  | 7 17  | 6 21 | 5 26 | 4 30 | 3 34 | 2 39 | 1 43 | 0 47 | 2 1 | 21 |
| 10                 | 7 50  | 6 55  | 5 59 | 5 4  | 4 8  | 3 12 | 2 17 | 1 21 | 0 25 | 2 0 | 20 |
| 11                 | 7 28  | 6 32  | 5 37 | 4 41 | 3 46 | 2 50 | 1 55 | 0 59 | 0 3  | 1 9 | 19 |
| 12                 | 7 5   | 6 9   | 5 14 | 4 18 | 3 23 | 2 27 | 1 32 | 0 36 | 0 19 | 1 8 | 18 |
| 13                 | 6 42  | 5 46  | 4 51 | 3 55 | 3 0  | 2 4  | 1 9  | 0 14 | 0 42 | 1 7 | 17 |
| 14                 | 6 19  | 5 23  | 4 28 | 3 32 | 2 37 | 1 41 | 0 46 | 0 9  | 1 5  | 1 6 | 16 |
| 15                 | 5 55  | 5 0   | 4 5  | 3 9  | 2 14 | 1 18 | 0 23 | 0 32 | 1 28 | 1 5 | 15 |
| 16                 | 5 32  | 4 37  | 3 42 | 2 46 | 1 51 | 0 55 | 0 0  | 0 55 | 1 51 | 1 4 | 14 |
| 17                 | 5 9   | 4 14  | 3 19 | 2 23 | 1 28 | 0 32 | 0 23 | 1 18 | 2 14 | 1 3 | 13 |
| 18                 | 4 45  | 3 50  | 2 55 | 2 0  | 1 4  | 0 9  | 0 46 | 1 41 | 2 37 | 1 2 | 12 |
| 19                 | 4 22  | 3 27  | 2 32 | 1 37 | 0 41 | 0 14 | 1 9  | 2 4  | 3 0  | 1 1 | 11 |
| 20                 | 3 58  | 3 3   | 2 8  | 1 13 | 0 18 | 0 38 | 1 33 | 2 28 | 3 23 | 1 0 | 10 |
| 21                 | 3 35  | 2 39  | 1 44 | 0 49 | 0 6  | 1 2  | 1 57 | 2 52 | 3 47 | 9   | 9  |
| 22                 | 3 11  | 2 16  | 1 21 | 0 26 | 0 29 | 1 25 | 2 20 | 3 15 | 4 10 | 8   | 8  |
| 23                 | 2 47  | 1 52  | 0 57 | 0 2  | 0 53 | 1 48 | 2 43 | 3 38 | 4 33 | 7   | 7  |
| 24                 | 2 23  | 1 28  | 0 33 | 0 22 | 1 17 | 2 12 | 3 7  | 4 2  | 4 57 | 6   | 6  |
| 25                 | 2 0   | 1 5   | 0 9  | 0 46 | 1 41 | 2 36 | 3 31 | 4 26 | 5 21 | 5   | 5  |
| 26                 | 1 36  | 0 41  | 0 15 | 1 10 | 2 5  | 3 0  | 3 55 | 4 50 | 5 45 | 4   | 4  |
| 27                 | 1 12  | 0 17  | 0 39 | 1 34 | 2 29 | 3 24 | 4 19 | 5 14 | 6 9  | 3   | 3  |
| 28                 | 0 48  | 0 7   | 1 3  | 1 57 | 2 52 | 3 47 | 4 42 | 5 37 | 6 32 | 2   | 2  |
| 29                 | 0 24  | 0 31  | 1 27 | 2 21 | 3 16 | 4 11 | 5 6  | 6 1  | 6 56 | 1   | 1  |
| 30                 | 0 0   | 0 55  | 1 50 | 2 45 | 3 40 | 4 35 | 5 30 | 6 25 | 7 20 | 0   | 0  |

Scp

Acc:



# Residua paro

## Latitudo Septentrionalis

| 2  | 8    | 7    | 6    | 5    | 4    | 3    | 2    | 1     | 0     | X  |
|----|------|------|------|------|------|------|------|-------|-------|----|
| S  | S m  | S m  | S m  | S m  | S m  | S m  | S m  | S m   | S m   | S  |
| 0  | 7 20 | 6 25 | 5 30 | 4 35 | 3 40 | 2 45 | 1 50 | 0 55  | 0 0   | 30 |
| 1  | 6 56 | 6 1  | 5 6  | 4 11 | 3 16 | 2 21 | 1 27 | 0 31  | 0 24  | 29 |
| 2  | 6 32 | 5 37 | 4 42 | 3 47 | 2 52 | 1 57 | 1 3  | 0 7   | 0 48  | 28 |
| 3  | 6 9  | 5 14 | 4 19 | 3 24 | 2 29 | 1 34 | 0 39 | 0 17  | 1 12  | 27 |
| 4  | 5 45 | 4 50 | 3 55 | 3 0  | 2 5  | 1 10 | 0 15 | 0 41  | 1 36  | 26 |
| 5  | 5 21 | 4 26 | 3 31 | 2 36 | 1 41 | 0 46 | 0 9  | 1 5   | 2 0   | 25 |
| 6  | 4 57 | 4 2  | 3 7  | 2 12 | 1 17 | 0 22 | 0 33 | 1 28  | 2 23  | 24 |
| 7  | 4 33 | 3 38 | 2 43 | 1 48 | 0 53 | 0 2  | 0 57 | 1 52  | 2 47  | 23 |
| 8  | 4 10 | 3 15 | 2 20 | 1 25 | 0 29 | 0 26 | 1 21 | 2 16  | 3 11  | 22 |
| 9  | 3 47 | 2 52 | 1 57 | 1 2  | 0 6  | 0 49 | 1 44 | 2 39  | 3 35  | 21 |
| 10 | 3 23 | 2 28 | 1 33 | 0 38 | 0 18 | 1 13 | 2 8  | 3 3   | 3 58  | 20 |
| 11 | 3 0  | 2 4  | 1 9  | 0 14 | 0 41 | 1 37 | 2 32 | 3 27  | 4 22  | 19 |
| 12 | 2 37 | 1 41 | 0 46 | 0 9  | 1 4  | 2 0  | 2 55 | 3 50  | 4 45  | 18 |
| 13 | 2 14 | 1 18 | 0 23 | 0 32 | 1 28 | 2 33 | 3 19 | 4 14  | 5 9   | 17 |
| 14 | 1 51 | 0 55 | 0 0  | 0 55 | 1 51 | 2 46 | 3 42 | 4 37  | 5 32  | 16 |
| 15 | 1 28 | 0 32 | 0 23 | 1 18 | 2 14 | 3 9  | 4 5  | 5 0   | 5 55  | 15 |
| 16 | 1 5  | 0 9  | 0 46 | 1 41 | 2 37 | 3 32 | 4 28 | 5 23  | 6 19  | 14 |
| 17 | 0 42 | 0 14 | 1 9  | 2 4  | 3 0  | 3 55 | 4 51 | 5 46  | 6 42  | 13 |
| 18 | 0 19 | 0 36 | 1 32 | 2 27 | 3 23 | 4 18 | 5 14 | 6 9   | 7 5   | 12 |
| 19 | 0 3  | 0 59 | 1 55 | 2 50 | 3 46 | 4 41 | 5 37 | 6 32  | 7 28  | 11 |
| 20 | 0 25 | 1 21 | 2 17 | 3 12 | 4 8  | 5 4  | 5 59 | 6 55  | 7 50  | 10 |
| 21 | 0 47 | 1 43 | 2 39 | 3 34 | 4 30 | 5 26 | 6 21 | 7 17  | 8 13  | 9  |
| 22 | 1 10 | 2 5  | 3 1  | 3 57 | 4 53 | 5 49 | 6 44 | 7 40  | 8 35  | 8  |
| 23 | 1 32 | 2 27 | 3 23 | 4 19 | 5 15 | 6 11 | 7 7  | 8 2   | 8 58  | 7  |
| 24 | 1 54 | 2 49 | 3 45 | 4 41 | 5 37 | 6 33 | 7 29 | 8 24  | 9 20  | 6  |
| 25 | 2 16 | 3 11 | 4 7  | 5 3  | 5 59 | 6 55 | 7 51 | 8 46  | 9 42  | 5  |
| 26 | 2 37 | 3 33 | 4 29 | 5 25 | 6 21 | 7 17 | 8 13 | 9 8   | 10 4  | 4  |
| 27 | 2 58 | 3 54 | 4 50 | 5 46 | 6 49 | 7 38 | 8 34 | 9 30  | 10 26 | 3  |
| 28 | 3 19 | 4 15 | 5 11 | 6 7  | 7 3  | 8 0  | 8 56 | 9 52  | 10 47 | 2  |
| 29 | 3 40 | 4 36 | 5 32 | 6 28 | 7 24 | 8 21 | 9 17 | 10 13 | 11 9  | 1  |
| 30 | 4 0  | 4 56 | 5 53 | 6 49 | 7 45 | 8 42 | 9 38 | 10 34 | 11 30 | 0  |



# Tabule Declinationum

|    |    | Latitudo Meridiana |       |       |       |       |       |       |       |       |    |   |
|----|----|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|----|---|
| X  | S  | 0                  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | S  | X |
|    |    | S m                | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   |    |   |
| 0  | 0  | 0                  | 0 55  | 1 50  | 2 45  | 3 40  | 4 35  | 5 30  | 6 25  | 7 20  | 30 |   |
| 1  | 0  | 24                 | 1 19  | 2 14  | 3 9   | 4 4   | 4 59  | 5 54  | 6 49  | 7 44  | 29 |   |
| 2  | 0  | 48                 | 1 43  | 2 38  | 3 33  | 4 28  | 5 23  | 6 18  | 7 12  | 8 8   | 28 |   |
| 3  | 1  | 12                 | 2 7   | 3 2   | 3 57  | 4 52  | 5 47  | 6 42  | 7 37  | 8 31  | 27 |   |
| 4  | 1  | 36                 | 2 31  | 3 26  | 4 21  | 5 16  | 6 11  | 7 6   | 8 0   | 8 55  | 26 |   |
| 5  | 2  | 0                  | 2 55  | 3 50  | 4 45  | 5 40  | 6 35  | 7 30  | 8 24  | 9 19  | 25 |   |
| 6  | 2  | 23                 | 3 18  | 4 13  | 5 8   | 6 3   | 6 58  | 7 53  | 8 48  | 9 43  | 24 |   |
| 7  | 2  | 47                 | 3 42  | 4 37  | 5 32  | 6 27  | 7 22  | 8 17  | 9 12  | 10 7  | 23 |   |
| 8  | 3  | 11                 | 4 6   | 5 1   | 5 56  | 6 51  | 7 46  | 8 41  | 9 36  | 10 31 | 22 |   |
| 9  | 3  | 35                 | 4 29  | 5 24  | 6 19  | 7 15  | 8 10  | 9 5   | 10 0  | 10 55 | 21 |   |
| 10 | 3  | 58                 | 4 53  | 5 48  | 6 43  | 7 39  | 8 34  | 9 29  | 10 24 | 11 19 | 20 |   |
| 11 | 4  | 22                 | 5 17  | 6 12  | 7 7   | 8 3   | 8 58  | 9 53  | 10 48 | 11 43 | 19 |   |
| 12 | 4  | 45                 | 5 41  | 6 36  | 7 31  | 8 26  | 9 21  | 10 16 | 11 11 | 12 6  | 18 |   |
| 13 | 4  | 9                  | 6 5   | 7 0   | 7 55  | 8 50  | 9 45  | 10 40 | 11 35 | 12 30 | 17 |   |
| 14 | 5  | 32                 | 6 28  | 7 23  | 8 18  | 9 13  | 10 9  | 11 4  | 11 59 | 12 54 | 16 |   |
| 15 | 5  | 55                 | 6 51  | 7 46  | 8 41  | 9 36  | 10 32 | 11 27 | 12 22 | 13 17 | 15 |   |
| 16 | 6  | 19                 | 7 14  | 8 9   | 9 5   | 10 0  | 10 56 | 11 51 | 12 46 | 13 41 | 14 |   |
| 17 | 6  | 42                 | 7 37  | 8 32  | 9 28  | 10 23 | 11 19 | 12 14 | 13 9  | 14 4  | 13 |   |
| 18 | 7  | 5                  | 8 0   | 8 55  | 9 51  | 10 46 | 11 42 | 12 37 | 13 32 | 14 27 | 12 |   |
| 19 | 7  | 28                 | 8 23  | 9 18  | 10 14 | 11 9  | 12 5  | 13 0  | 13 55 | 14 50 | 11 |   |
| 20 | 7  | 50                 | 8 46  | 9 41  | 10 37 | 11 32 | 12 28 | 13 23 | 14 18 | 15 13 | 10 |   |
| 21 | 8  | 13                 | 9 8   | 10 4  | 10 59 | 11 55 | 12 50 | 13 46 | 14 41 | 15 36 | 9  |   |
| 22 | 8  | 35                 | 9 31  | 10 27 | 11 22 | 12 18 | 13 13 | 14 9  | 15 4  | 15 59 | 8  |   |
| 23 | 8  | 58                 | 9 54  | 10 50 | 11 45 | 12 41 | 13 36 | 14 32 | 15 27 | 16 22 | 7  |   |
| 24 | 9  | 20                 | 10 16 | 11 12 | 12 7  | 13 3  | 13 59 | 14 54 | 15 50 | 16 45 | 6  |   |
| 25 | 9  | 42                 | 10 38 | 11 34 | 12 29 | 13 25 | 14 21 | 15 17 | 16 13 | 17 8  | 5  |   |
| 26 | 10 | 4                  | 11 0  | 11 56 | 12 51 | 13 47 | 14 43 | 15 39 | 16 35 | 17 30 | 4  |   |
| 27 | 10 | 26                 | 11 22 | 12 18 | 13 13 | 14 9  | 15 5  | 16 1  | 16 57 | 17 52 | 3  |   |
| 28 | 10 | 47                 | 11 44 | 12 40 | 13 35 | 14 31 | 15 27 | 16 23 | 17 19 | 18 12 | 2  |   |
| 29 | 11 | 9                  | 12 5  | 13 1  | 13 59 | 14 53 | 15 49 | 16 45 | 17 41 | 18 34 | 1  |   |
| 30 | 11 | 30                 | 12 26 | 13 22 | 14 18 | 15 14 | 16 10 | 17 6  | 18 2  | 18 58 | 0  |   |



# Residua pars

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |     |    |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
| m                        | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     |     | m  |
| S                        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m | S  |
| 0                        | 4 0   | 4 56  | 5 53  | 6 49  | 7 45  | 8 42  | 9 38  | 10 34 | 11 30 |     | 30 |
| 1                        | 4 21  | 5 17  | 6 14  | 7 10  | 8 6   | 9 3   | 9 54  | 10 55 | 11 51 |     | 29 |
| 2                        | 4 41  | 5 37  | 6 34  | 7 30  | 8 27  | 9 23  | 10 19 | 11 16 | 12 12 |     | 28 |
| 3                        | 5 1   | 5 57  | 6 54  | 7 50  | 8 47  | 9 43  | 10 39 | 11 36 | 12 32 |     | 27 |
| 4                        | 5 21  | 6 17  | 7 14  | 8 10  | 9 7   | 10 3  | 11 0  | 11 57 | 12 53 |     | 26 |
| 5                        | 5 41  | 6 37  | 7 34  | 8 30  | 9 27  | 10 23 | 11 20 | 12 17 | 13 13 |     | 25 |
| 6                        | 6 0   | 6 56  | 7 53  | 8 50  | 9 47  | 10 43 | 11 40 | 12 37 | 13 33 |     | 24 |
| 7                        | 6 19  | 7 15  | 8 12  | 9 9   | 10 6  | 11 3  | 12 0  | 12 57 | 13 53 |     | 23 |
| 8                        | 6 38  | 7 34  | 8 31  | 9 28  | 10 25 | 11 22 | 12 19 | 13 16 | 14 13 |     | 22 |
| 9                        | 6 56  | 7 53  | 8 50  | 9 47  | 10 44 | 11 41 | 12 38 | 13 35 | 14 32 |     | 21 |
| 10                       | 7 15  | 8 12  | 9 9   | 10 6  | 11 3  | 12 0  | 12 57 | 13 54 | 14 51 |     | 20 |
| 11                       | 7 33  | 8 30  | 9 27  | 10 24 | 11 22 | 12 19 | 13 16 | 14 13 | 15 10 |     | 19 |
| 12                       | 7 51  | 8 48  | 9 45  | 10 42 | 11 40 | 12 37 | 13 34 | 14 31 | 15 28 |     | 18 |
| 13                       | 8 9   | 9 6   | 10 3  | 11 0  | 11 58 | 12 55 | 13 52 | 14 49 | 15 47 |     | 17 |
| 14                       | 8 26  | 9 23  | 10 21 | 11 18 | 12 16 | 13 13 | 14 10 | 15 7  | 16 5  |     | 16 |
| 15                       | 8 43  | 9 40  | 10 38 | 11 35 | 12 33 | 13 30 | 14 27 | 15 25 | 16 23 |     | 15 |
| 16                       | 9 0   | 9 57  | 10 55 | 11 52 | 12 50 | 13 47 | 14 45 | 15 42 | 16 40 |     | 14 |
| 17                       | 9 16  | 10 14 | 11 12 | 12 9  | 13 7  | 14 4  | 15 2  | 15 59 | 16 57 |     | 13 |
| 18                       | 9 32  | 10 30 | 11 28 | 12 25 | 13 23 | 14 21 | 15 19 | 16 16 | 17 14 |     | 12 |
| 19                       | 9 48  | 10 45 | 11 44 | 12 41 | 13 39 | 14 37 | 15 35 | 16 33 | 17 31 |     | 11 |
| 20                       | 10 4  | 11 2  | 12 0  | 12 57 | 13 55 | 14 53 | 15 51 | 16 49 | 17 47 |     | 10 |
| 21                       | 10 19 | 11 17 | 12 15 | 13 13 | 14 11 | 15 9  | 16 7  | 17 5  | 18 3  |     | 9  |
| 22                       | 10 34 | 11 32 | 12 30 | 13 28 | 14 27 | 15 25 | 16 23 | 17 21 | 18 19 |     | 8  |
| 23                       | 10 49 | 11 47 | 12 45 | 13 43 | 14 42 | 15 40 | 16 38 | 17 36 | 18 34 |     | 7  |
| 24                       | 11 4  | 12 2  | 13 0  | 13 58 | 14 57 | 15 55 | 16 53 | 17 51 | 18 49 |     | 6  |
| 25                       | 11 18 | 12 16 | 13 14 | 14 12 | 15 11 | 16 9  | 17 7  | 18 6  | 19 4  |     | 5  |
| 26                       | 11 32 | 12 30 | 13 28 | 14 26 | 15 25 | 16 23 | 17 21 | 18 20 | 19 18 |     | 4  |
| 27                       | 11 45 | 12 43 | 13 41 | 14 40 | 15 38 | 16 37 | 17 35 | 18 34 | 19 32 |     | 3  |
| 28                       | 11 58 | 12 56 | 13 54 | 14 53 | 15 51 | 16 50 | 17 49 | 18 47 | 19 46 |     | 2  |
| 29                       | 12 11 | 13 9  | 14 7  | 15 6  | 16 4  | 17 3  | 18 2  | 19 0  | 19 59 |     | 1  |
| 30                       | 12 23 | 13 21 | 14 20 | 15 19 | 16 17 | 17 16 | 18 15 | 19 13 | 20 12 |     | 0  |



# Tabule Declinationum

| Latitudo Meridiana |       |       |       |       |       |       |       |       |       |     |    |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
| m                  | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |     | m  |
| h                  | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m | h  |
| 0                  | 11 30 | 12 26 | 13 22 | 14 18 | 15 14 | 16 10 | 17 6  | 18 2  | 18 58 |     | 30 |
| 1                  | 11 51 | 12 47 | 13 43 | 14 39 | 15 35 | 16 32 | 17 28 | 18 24 | 19 20 |     | 29 |
| 2                  | 12 12 | 13 8  | 14 4  | 15 0  | 15 56 | 16 53 | 17 49 | 18 45 | 19 41 |     | 28 |
| 3                  | 12 33 | 13 29 | 14 25 | 15 21 | 16 17 | 17 14 | 18 10 | 19 6  | 20 2  |     | 27 |
| 4                  | 12 53 | 13 50 | 14 46 | 15 42 | 16 38 | 17 35 | 18 31 | 19 27 | 20 23 |     | 26 |
| 5                  | 13 13 | 14 10 | 15 6  | 16 3  | 16 59 | 17 56 | 18 52 | 19 48 | 20 44 |     | 25 |
| 6                  | 13 33 | 14 30 | 15 26 | 16 23 | 17 19 | 18 16 | 19 12 | 20 9  | 21 5  |     | 24 |
| 7                  | 13 53 | 14 50 | 15 46 | 16 43 | 17 39 | 18 36 | 19 32 | 20 29 | 21 25 |     | 23 |
| 8                  | 14 13 | 14 10 | 16 6  | 17 3  | 17 59 | 18 56 | 19 52 | 20 49 | 21 45 |     | 22 |
| 9                  | 14 32 | 15 29 | 16 25 | 17 22 | 18 19 | 19 16 | 20 12 | 21 9  | 22 5  |     | 21 |
| 10                 | 14 51 | 15 48 | 16 44 | 17 41 | 18 38 | 19 35 | 20 32 | 21 29 | 22 25 |     | 20 |
| 11                 | 15 10 | 16 7  | 17 3  | 18 0  | 18 57 | 19 54 | 20 51 | 21 48 | 22 45 |     | 19 |
| 12                 | 15 28 | 16 25 | 17 22 | 18 19 | 19 16 | 20 13 | 21 10 | 22 7  | 23 4  |     | 18 |
| 13                 | 15 47 | 16 44 | 17 41 | 18 38 | 19 35 | 20 32 | 21 29 | 22 26 | 23 23 |     | 17 |
| 14                 | 16 5  | 17 2  | 17 59 | 18 56 | 19 53 | 20 51 | 21 48 | 22 45 | 23 42 |     | 16 |
| 15                 | 16 32 | 17 20 | 18 17 | 19 14 | 20 11 | 21 9  | 22 6  | 23 3  | 24 0  |     | 15 |
| 16                 | 16 40 | 17 37 | 18 35 | 19 32 | 20 29 | 21 27 | 22 24 | 23 21 | 24 18 |     | 14 |
| 17                 | 16 57 | 17 54 | 18 52 | 19 50 | 20 47 | 21 45 | 22 42 | 23 39 | 24 36 |     | 13 |
| 18                 | 17 14 | 18 11 | 19 9  | 20 7  | 21 4  | 22 2  | 22 59 | 23 56 | 24 54 |     | 12 |
| 19                 | 17 31 | 18 28 | 19 26 | 20 24 | 21 21 | 22 19 | 23 16 | 24 13 | 25 11 |     | 11 |
| 20                 | 17 47 | 18 45 | 19 43 | 20 40 | 21 38 | 22 36 | 23 33 | 24 30 | 25 28 |     | 10 |
| 21                 | 18 3  | 19 1  | 19 59 | 20 56 | 21 54 | 22 52 | 23 50 | 24 47 | 25 45 |     | 9  |
| 22                 | 18 19 | 19 17 | 20 15 | 21 12 | 22 10 | 23 8  | 23 6  | 25 4  | 26 2  |     | 8  |
| 23                 | 18 34 | 19 33 | 20 31 | 21 28 | 22 26 | 23 24 | 24 22 | 25 20 | 26 18 |     | 7  |
| 24                 | 18 49 | 19 48 | 20 46 | 21 44 | 22 42 | 23 40 | 24 38 | 25 36 | 26 34 |     | 6  |
| 25                 | 19 4  | 20 2  | 21 1  | 21 59 | 22 57 | 23 55 | 24 53 | 25 51 | 26 49 |     | 5  |
| 26                 | 19 18 | 20 16 | 21 15 | 22 13 | 23 11 | 24 10 | 25 8  | 26 6  | 27 4  |     | 4  |
| 27                 | 19 32 | 20 30 | 21 29 | 22 27 | 23 25 | 24 24 | 25 22 | 26 20 | 27 18 |     | 3  |
| 28                 | 19 46 | 20 44 | 21 43 | 22 41 | 23 39 | 24 38 | 25 36 | 26 34 | 27 32 |     | 2  |
| 29                 | 19 59 | 20 58 | 21 56 | 22 55 | 23 53 | 24 52 | 25 50 | 26 48 | 27 46 |     | 1  |
| 30                 | 20 12 | 21 11 | 22 9  | 23 8  | 24 6  | 25 5  | 26 3  | 27 2  | 28 0  |     | 0  |



Residua pare

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |     |    |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|----|
| °                        | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     |     | °  |
| h                        | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m   | h m | h  |
| 0                        | 12 23 | 13 21 | 14 20 | 15 19 | 16 17 | 17 16 | 18 15 | 19 13 | 20 12 |     | 30 |
| 1                        | 12 35 | 13 33 | 14 32 | 15 31 | 16 29 | 17 28 | 18 27 | 19 26 | 20 25 |     | 29 |
| 2                        | 12 47 | 13 45 | 14 44 | 15 43 | 16 41 | 17 40 | 18 39 | 19 36 | 20 37 |     | 28 |
| 3                        | 12 58 | 13 57 | 14 56 | 15 55 | 16 53 | 17 52 | 18 51 | 19 50 | 20 49 |     | 27 |
| 4                        | 13 9  | 14 8  | 15 7  | 16 6  | 17 4  | 18 3  | 19 2  | 20 1  | 21 0  |     | 26 |
| 5                        | 13 19 | 14 18 | 15 17 | 16 16 | 17 15 | 18 14 | 19 13 | 20 12 | 21 11 |     | 25 |
| 6                        | 13 29 | 14 28 | 15 27 | 16 26 | 17 26 | 18 25 | 19 24 | 20 23 | 21 22 |     | 24 |
| 7                        | 13 39 | 14 38 | 15 37 | 16 36 | 17 36 | 18 35 | 19 34 | 20 33 | 21 32 |     | 23 |
| 8                        | 13 48 | 14 47 | 15 47 | 16 46 | 17 46 | 18 45 | 19 44 | 20 43 | 21 42 |     | 22 |
| 9                        | 13 57 | 14 56 | 15 56 | 16 55 | 17 55 | 18 54 | 19 53 | 20 52 | 21 51 |     | 21 |
| 10                       | 14 5  | 15 5  | 16 4  | 17 4  | 18 3  | 19 3  | 20 2  | 21 1  | 22 0  |     | 20 |
| 11                       | 14 13 | 15 13 | 16 12 | 17 12 | 18 11 | 19 11 | 20 10 | 21 10 | 22 9  |     | 19 |
| 12                       | 14 21 | 15 21 | 16 20 | 17 20 | 18 19 | 19 19 | 20 18 | 21 18 | 22 17 |     | 18 |
| 13                       | 14 28 | 15 28 | 16 27 | 17 27 | 18 27 | 19 26 | 20 26 | 21 26 | 22 25 |     | 17 |
| 14                       | 14 35 | 15 35 | 16 34 | 17 34 | 18 34 | 19 33 | 20 33 | 21 33 | 22 32 |     | 16 |
| 15                       | 14 42 | 15 42 | 16 41 | 17 41 | 18 41 | 19 40 | 20 40 | 21 40 | 22 39 |     | 15 |
| 16                       | 14 48 | 15 48 | 16 47 | 17 47 | 18 47 | 19 46 | 20 46 | 21 46 | 22 46 |     | 14 |
| 17                       | 14 54 | 15 54 | 16 53 | 17 53 | 18 53 | 19 52 | 20 52 | 21 52 | 22 52 |     | 13 |
| 18                       | 14 59 | 15 59 | 16 58 | 17 58 | 18 58 | 19 58 | 20 57 | 21 57 | 22 57 |     | 12 |
| 19                       | 15 4  | 16 4  | 17 3  | 18 3  | 19 3  | 20 3  | 21 2  | 22 2  | 23 3  |     | 11 |
| 20                       | 15 9  | 16 9  | 17 8  | 18 8  | 19 8  | 20 8  | 21 7  | 22 7  | 23 7  |     | 10 |
| 21                       | 15 13 | 16 13 | 17 13 | 18 13 | 19 13 | 20 13 | 21 12 | 22 12 | 23 12 |     | 9  |
| 22                       | 15 16 | 16 16 | 17 16 | 18 16 | 19 16 | 20 16 | 21 16 | 22 16 | 23 15 |     | 8  |
| 23                       | 15 19 | 16 19 | 17 19 | 18 19 | 19 19 | 20 19 | 21 19 | 22 19 | 23 19 |     | 7  |
| 24                       | 15 22 | 16 22 | 17 22 | 18 22 | 19 22 | 20 22 | 21 22 | 22 22 | 23 22 |     | 6  |
| 25                       | 15 24 | 16 24 | 17 24 | 18 24 | 19 24 | 20 24 | 21 24 | 22 24 | 23 24 |     | 5  |
| 26                       | 15 26 | 16 26 | 17 26 | 18 26 | 19 26 | 20 26 | 21 26 | 22 26 | 23 26 |     | 4  |
| 27                       | 15 28 | 16 28 | 17 28 | 18 28 | 19 28 | 20 28 | 21 28 | 22 28 | 23 28 |     | 3  |
| 28                       | 15 29 | 16 29 | 17 29 | 18 29 | 19 29 | 20 29 | 21 29 | 22 29 | 23 29 |     | 2  |
| 29                       | 15 30 | 16 30 | 17 30 | 18 30 | 19 30 | 20 30 | 21 30 | 22 30 | 23 30 |     | 1  |
| 30                       | 15 30 | 16 30 | 17 30 | 18 30 | 19 30 | 20 30 | 21 30 | 22 30 | 23 30 |     | 0  |



# Tabule declinationum

|    |    | Latitudo Meridiana |       |       |       |       |       |       |       |       |    |   |
|----|----|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|----|---|
| T  | S  | 0                  | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | S  | S |
|    |    | S m                | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   |    |   |
| 0  | 20 | 12                 | 21 11 | 22 9  | 23 8  | 24 6  | 25 5  | 26 3  | 27 2  | 28 0  | 30 |   |
| 1  | 20 | 25                 | 21 24 | 22 22 | 23 21 | 24 19 | 25 18 | 26 16 | 27 15 | 28 13 | 29 |   |
| 2  | 20 | 37                 | 21 36 | 22 35 | 23 34 | 24 32 | 25 31 | 26 29 | 27 28 | 28 26 | 28 |   |
| 3  | 20 | 49                 | 21 48 | 22 47 | 23 46 | 24 44 | 25 43 | 26 42 | 27 41 | 28 39 | 27 |   |
| 4  | 21 | 0                  | 21 59 | 22 58 | 23 57 | 24 56 | 25 55 | 26 54 | 27 53 | 28 51 | 26 |   |
| 5  | 21 | 11                 | 22 10 | 23 9  | 24 8  | 25 7  | 26 6  | 27 5  | 28 4  | 29 3  | 25 |   |
| 6  | 21 | 22                 | 22 21 | 23 20 | 24 19 | 25 19 | 26 17 | 27 16 | 28 15 | 29 14 | 24 |   |
| 7  | 21 | 32                 | 22 31 | 23 30 | 24 30 | 25 29 | 26 28 | 27 27 | 28 26 | 29 25 | 23 |   |
| 8  | 21 | 42                 | 22 41 | 23 40 | 24 40 | 25 39 | 26 38 | 27 37 | 28 36 | 29 36 | 22 |   |
| 9  | 21 | 51                 | 22 51 | 23 50 | 24 50 | 25 49 | 26 48 | 27 47 | 28 46 | 29 46 | 21 |   |
| 10 | 22 | 0                  | 23 0  | 23 59 | 24 59 | 25 58 | 26 57 | 27 56 | 28 55 | 29 55 | 20 |   |
| 11 | 22 | 9                  | 23 9  | 24 8  | 25 8  | 26 7  | 27 6  | 28 5  | 29 4  | 30 4  | 19 |   |
| 12 | 22 | 17                 | 23 17 | 24 16 | 25 16 | 26 15 | 27 14 | 28 14 | 29 13 | 30 13 | 18 |   |
| 13 | 22 | 25                 | 23 25 | 24 24 | 25 24 | 26 23 | 27 22 | 28 22 | 29 21 | 30 21 | 17 |   |
| 14 | 22 | 32                 | 23 32 | 24 32 | 25 31 | 26 31 | 27 30 | 28 30 | 29 29 | 30 29 | 16 |   |
| 15 | 22 | 39                 | 23 39 | 24 39 | 25 38 | 26 38 | 27 37 | 28 37 | 29 36 | 30 36 | 15 |   |
| 16 | 22 | 46                 | 23 46 | 24 45 | 25 44 | 26 44 | 27 44 | 28 43 | 29 43 | 30 43 | 14 |   |
| 17 | 22 | 52                 | 23 51 | 24 51 | 25 50 | 26 50 | 27 50 | 28 49 | 29 49 | 30 49 | 13 |   |
| 18 | 22 | 57                 | 23 57 | 24 57 | 25 56 | 26 56 | 27 56 | 28 55 | 29 55 | 30 51 | 12 |   |
| 19 | 23 | 3                  | 24 2  | 25 2  | 26 2  | 27 2  | 28 1  | 29 1  | 30 1  | 31 1  | 11 |   |
| 20 | 23 | 7                  | 24 7  | 25 7  | 26 7  | 27 7  | 28 6  | 29 6  | 30 6  | 31 6  | 10 |   |
| 21 | 23 | 12                 | 24 12 | 25 12 | 26 12 | 27 12 | 28 11 | 29 11 | 30 11 | 31 11 | 9  |   |
| 22 | 23 | 15                 | 24 16 | 25 16 | 26 16 | 27 15 | 28 15 | 29 15 | 30 15 | 31 15 | 8  |   |
| 23 | 23 | 19                 | 24 19 | 25 19 | 26 19 | 27 18 | 28 18 | 29 18 | 30 18 | 31 18 | 7  |   |
| 24 | 23 | 22                 | 24 22 | 25 22 | 26 22 | 27 21 | 28 21 | 29 21 | 30 21 | 31 21 | 6  |   |
| 25 | 23 | 24                 | 24 24 | 25 24 | 26 24 | 27 24 | 28 24 | 29 24 | 30 24 | 31 24 | 5  |   |
| 26 | 23 | 26                 | 24 26 | 25 26 | 26 26 | 27 26 | 28 26 | 29 26 | 30 26 | 31 26 | 4  |   |
| 27 | 23 | 28                 | 24 28 | 25 28 | 26 28 | 27 28 | 28 28 | 29 28 | 30 28 | 31 28 | 3  |   |
| 28 | 23 | 29                 | 24 29 | 25 29 | 26 29 | 27 29 | 28 29 | 29 29 | 30 29 | 31 29 | 2  |   |
| 29 | 23 | 30                 | 24 30 | 25 30 | 26 30 | 27 30 | 28 30 | 29 30 | 30 30 | 31 30 | 1  |   |
| 30 | 23 | 30                 | 24 30 | 25 30 | 26 30 | 27 30 | 28 30 | 29 30 | 30 30 | 31 30 | 0  |   |



# Tabula declinationum generalis

|    | Arcus | Nuér <sup>o</sup> mul | Arcus | Nuér <sup>o</sup> mul | Arcus | Nuér <sup>o</sup> mul |
|----|-------|-----------------------|-------|-----------------------|-------|-----------------------|
|    | V     | tiplicadus            | δ     | tiplicadus            | π     | tiplicadus            |
| δ  | δ m   |                       | δ m   |                       | δ m   | δ                     |
| 0  | 0 0   | 91707                 | 12 16 | 93848                 | 20 38 | 97991                 |
| 1  | 0 26  | 91710                 | 12 37 | 93977                 | 20 40 | 98112                 |
| 2  | 0 52  | 91718                 | 12 58 | 94108                 | 21 0  | 98232                 |
| 3  | 1 18  | 91730                 | 13 19 | 94242                 | 21 11 | 98347                 |
| 4  | 1 44  | 91747                 | 13 40 | 94378                 | 21 21 | 98460                 |
| 5  | 2 10  | 91770                 | 14 0  | 94516                 | 21 31 | 98570                 |
| 6  | 2 36  | 91798                 | 14 20 | 94655                 | 21 40 | 98676                 |
| 7  | 3 2   | 91831                 | 14 40 | 94795                 | 21 49 | 98778                 |
| 8  | 3 28  | 91869                 | 14 59 | 94936                 | 21 58 | 98878                 |
| 9  | 3 53  | 91912                 | 15 18 | 95077                 | 22 6  | 98973                 |
| 10 | 4 19  | 91960                 | 15 37 | 95219                 | 22 14 | 99066                 |
| 11 | 4 45  | 92014                 | 15 55 | 95362                 | 22 21 | 99153                 |
| 12 | 5 10  | 92073                 | 16 13 | 95505                 | 22 28 | 99237                 |
| 13 | 5 35  | 92138                 | 16 31 | 95649                 | 22 35 | 99317                 |
| 14 | 6 0   | 92209                 | 16 48 | 95794                 | 22 41 | 99393                 |
| 15 | 6 25  | 92283                 | 17 5  | 95940                 | 22 47 | 99465                 |
| 16 | 6 50  | 92361                 | 17 22 | 96085                 | 22 52 | 99532                 |
| 17 | 7 15  | 92443                 | 17 38 | 96230                 | 22 57 | 99595                 |
| 18 | 7 39  | 92528                 | 17 54 | 96374                 | 23 2  | 99654                 |
| 19 | 8 3   | 92617                 | 18 10 | 96517                 | 23 7  | 99708                 |
| 20 | 8 27  | 92710                 | 18 25 | 96659                 | 23 11 | 99758                 |
| 21 | 8 51  | 92808                 | 18 40 | 96800                 | 23 15 | 99803                 |
| 22 | 9 15  | 92910                 | 18 55 | 96940                 | 23 18 | 99844                 |
| 23 | 9 39  | 93017                 | 19 9  | 97080                 | 23 21 | 99881                 |
| 24 | 10 2  | 93227                 | 19 23 | 97217                 | 23 23 | 99913                 |
| 25 | 10 25 | 93239                 | 19 36 | 97351                 | 23 25 | 99940                 |
| 26 | 10 48 | 93355                 | 19 49 | 97482                 | 23 27 | 99962                 |
| 27 | 11 10 | 93474                 | 20 2  | 97612                 | 23 28 | 99978                 |
| 28 | 11 32 | 93596                 | 20 14 | 97741                 | 23 29 | 99990                 |
| 29 | 11 54 | 93721                 | 20 26 | 97867                 | 23 30 | 99997                 |
| 30 | 12 16 | 93848                 | 20 38 | 97991                 | 23 30 | 10000                 |
|    | up X  |                       | δ     | π                     | δ     |                       |

Cū lon<sup>g</sup> accipi Arcū, & nūz Multiplicadus, deinde quēz sinū  
 dei arcus quē duc in nūz Multiplicadus servatū. & ex  
 productis reliquisq; figuris dextris, & residuū erit sinū  
 arcus oppositū, quē sinū quēz in Tabla sinūs rectū, &  
 inueniū. in front. q. & in latē. M. q. erit dexte  
 sita, erit lon<sup>g</sup> sinūs & lon<sup>g</sup> pille. /.



Tabula Secunda

| Numerus |       | Numerus |        | Numerus |           |
|---------|-------|---------|--------|---------|-----------|
| B       |       | B       |        | B       |           |
| 0       | 00000 | 31      | 60086  | 61      | 180402    |
| 1       | 11745 | 32      | 62486  | 62      | 188075    |
| 2       | 13492 | 33      | 64940  | 63      | 196263    |
| 3       | 15240 | 34      | 67452  | 64      | 205034    |
| 4       | 16992 | 35      | 70022  | 65      | 214450    |
| 5       | 18748 | 36      | 72654  | 66      | 224607    |
| 6       | 10511 | 37      | 75356  | 67      | 235583    |
| 7       | 12278 | 38      | 78129  | 68      | 247513    |
| 8       | 14053 | 39      | 80978  | 69      | 260511    |
| 9       | 15838 | 40      | 83909  | 70      | 274753    |
| 10      | 17633 | 41      | 86929  | 71      | 290422    |
| 11      | 19439 | 42      | 93040  | 72      | 307767    |
| 12      | 21256 | 43      | 90254  | 73      | 327088    |
| 13      | 23087 | 44      | 96571  | 74      | 348748    |
| 14      | 24932 | 45      | 100000 | 75      | 373211    |
| 15      | 26794 | 46      | 103551 | 76      | 401089    |
| 16      | 28674 | 47      | 107236 | 77      | 433148    |
| 17      | 30573 | 48      | 111062 | 78      | 470453    |
| 18      | 32492 | 49      | 115037 | 79      | 514438    |
| 19      | 34433 | 50      | 119197 | 80      | 567118    |
| 20      | 36396 | 51      | 123491 | 81      | 631377    |
| 21      | 38387 | 52      | 127994 | 82      | 711569    |
| 22      | 40402 | 53      | 132704 | 83      | 814456    |
| 23      | 42448 | 54      | 137639 | 84      | 951387    |
| 24      | 44522 | 55      | 142813 | 85      | 1143131   |
| 25      | 46631 | 56      | 148253 | 86      | 1430203   |
| 26      | 48772 | 57      | 153987 | 87      | 1908217   |
| 27      | 50952 | 58      | 160035 | 88      | 2863563   |
| 28      | 53170 | 59      | 166429 | 89      | 5729796   |
| 29      | 55432 | 60      | 173207 | 90      | Infinitum |
| 30      | 57734 |         |        |         |           |



# Tabula

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |       |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| V                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0     |
| S                        | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m   |
| 0                        | 356 48 | 357 13 | 357 37 | 358 1  | 358 25 | 358 49 | 359 13 | 359 37 | 0 0   |
| 1                        | 257 43 | 358 8  | 358 32 | 358 56 | 359 20 | 359 44 | 0 8    | 0 32   | 0 55  |
| 2                        | 358 38 | 359 3  | 359 27 | 359 51 | 0 15   | 0 39   | 1 3    | 1 27   | 1 50  |
| 3                        | 359 34 | 359 58 | 0 22   | 0 46   | 1 10   | 1 34   | 1 58   | 2 22   | 2 45  |
| 4                        | 0 29   | 0 53   | 1 17   | 1 41   | 2 5    | 2 29   | 2 53   | 3 17   | 3 40  |
| 5                        | 1 24   | 1 48   | 2 12   | 2 36   | 3 0    | 3 24   | 3 48   | 4 12   | 4 35  |
| 6                        | 2 19   | 2 43   | 3 7    | 3 31   | 3 55   | 4 19   | 4 43   | 5 7    | 5 30  |
| 7                        | 3 14   | 3 38   | 4 2    | 4 26   | 4 40   | 5 14   | 5 38   | 6 2    | 6 25  |
| 8                        | 4 0    | 4 33   | 4 57   | 5 21   | 5 45   | 6 9    | 6 33   | 6 57   | 7 20  |
| 9                        | 5 4    | 5 28   | 5 52   | 6 16   | 6 40   | 7 4    | 7 28   | 7 52   | 8 15  |
| 10                       | 5 59   | 6 23   | 6 47   | 7 11   | 7 35   | 7 59   | 8 23   | 8 47   | 9 11  |
| 11                       | 6 55   | 7 19   | 7 43   | 8 7    | 8 31   | 8 55   | 9 18   | 9 42   | 10 6  |
| 12                       | 7 51   | 8 15   | 8 39   | 9 3    | 9 27   | 9 51   | 10 14  | 10 38  | 11 1  |
| 13                       | 8 46   | 9 10   | 9 34   | 9 58   | 10 22  | 10 46  | 11 9   | 11 33  | 11 57 |
| 14                       | 9 42   | 10 6   | 10 30  | 10 54  | 11 17  | 11 42  | 12 5   | 12 29  | 12 52 |
| 15                       | 10 38  | 11 2   | 11 26  | 11 50  | 12 14  | 12 38  | 13 1   | 13 25  | 13 48 |
| 16                       | 11 34  | 11 58  | 12 22  | 12 46  | 13 10  | 13 34  | 13 57  | 14 20  | 14 43 |
| 17                       | 12 30  | 12 54  | 13 18  | 13 42  | 14 6   | 14 30  | 14 53  | 15 16  | 15 39 |
| 18                       | 13 27  | 13 51  | 14 15  | 14 39  | 15 2   | 15 26  | 15 49  | 16 12  | 16 35 |
| 19                       | 14 23  | 14 47  | 15 11  | 15 35  | 15 58  | 16 22  | 16 45  | 17 8   | 17 31 |
| 20                       | 15 20  | 15 44  | 16 7   | 16 31  | 16 54  | 17 18  | 17 41  | 18 4   | 18 27 |
| 21                       | 16 17  | 16 41  | 17 4   | 17 28  | 17 51  | 18 14  | 18 37  | 19 0   | 19 23 |
| 22                       | 17 14  | 17 38  | 18 1   | 18 25  | 18 48  | 19 11  | 19 33  | 19 59  | 20 19 |
| 23                       | 18 11  | 18 35  | 18 58  | 19 22  | 19 45  | 20 8   | 20 30  | 20 53  | 21 15 |
| 24                       | 19 8   | 19 32  | 19 55  | 20 19  | 20 42  | 21 5   | 21 27  | 21 50  | 22 12 |
| 25                       | 20 5   | 20 29  | 20 52  | 21 16  | 21 39  | 22 2   | 22 24  | 22 47  | 23 9  |
| 26                       | 21 3   | 21 27  | 21 50  | 22 13  | 22 36  | 22 59  | 23 21  | 23 44  | 24 6  |
| 27                       | 22 1   | 22 25  | 22 48  | 23 11  | 23 34  | 23 57  | 24 19  | 24 41  | 25 3  |
| 28                       | 22 59  | 23 23  | 23 46  | 24 9   | 24 31  | 24 54  | 25 16  | 25 38  | 26 0  |
| 29                       | 23 57  | 24 21  | 24 44  | 25 7   | 25 29  | 25 51  | 26 13  | 26 35  | 26 57 |
| 30                       | 24 56  | 25 19  | 25 42  | 26 5   | 26 27  | 26 49  | 27 11  | 27 33  | 27 54 |



# Tablæ Mediarum

|    |       | Latitudo Meridiana |       |       |       |       |       |       |       |     |     |
|----|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| V  | 0     | 1                  | 2     | 3     | 4     | 5     | 6     | 7     | 8     |     |     |
| B  | B m   | B m                | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m | B m |
| 0  | 0 0   | 0 23               | 0 47  | 1 11  | 1 35  | 1 59  | 2 23  | 2 47  | 3 12  |     |     |
| 1  | 0 55  | 1 18               | 1 42  | 2 6   | 2 30  | 2 54  | 3 18  | 3 42  | 4 6   |     |     |
| 2  | 1 50  | 2 13               | 2 37  | 3 1   | 3 25  | 3 49  | 4 13  | 4 37  | 5 1   |     |     |
| 3  | 2 45  | 3 8                | 3 32  | 3 56  | 4 20  | 4 44  | 5 8   | 5 32  | 5 56  |     |     |
| 4  | 3 40  | 4 3                | 4 27  | 4 51  | 5 15  | 5 39  | 6 3   | 6 27  | 6 50  |     |     |
| 5  | 4 35  | 4 57               | 5 22  | 5 46  | 6 10  | 6 34  | 6 58  | 7 22  | 7 45  |     |     |
| 6  | 5 30  | 5 54               | 6 18  | 6 42  | 7 6   | 7 30  | 7 53  | 8 17  | 8 40  |     |     |
| 7  | 6 25  | 6 49               | 7 13  | 7 37  | 8 1   | 8 25  | 8 48  | 9 12  | 9 35  |     |     |
| 8  | 7 20  | 7 44               | 8 8   | 8 32  | 8 56  | 9 20  | 9 43  | 10 7  | 10 30 |     |     |
| 9  | 8 15  | 8 39               | 9 3   | 9 27  | 9 51  | 10 15 | 10 38 | 11 2  | 11 25 |     |     |
| 10 | 9 11  | 9 34               | 9 58  | 10 22 | 10 46 | 11 10 | 11 33 | 11 57 | 12 19 |     |     |
| 11 | 10 6  | 10 29              | 10 53 | 11 17 | 11 41 | 12 5  | 12 28 | 12 52 | 13 14 |     |     |
| 12 | 11 1  | 11 25              | 11 48 | 12 13 | 12 36 | 13 0  | 13 23 | 13 47 | 14 9  |     |     |
| 13 | 11 57 | 12 20              | 12 43 | 13 8  | 13 31 | 13 55 | 14 18 | 14 41 | 15 4  |     |     |
| 14 | 12 52 | 13 16              | 13 39 | 14 3  | 14 26 | 14 50 | 15 13 | 15 36 | 15 59 |     |     |
| 15 | 13 48 | 14 12              | 14 35 | 14 58 | 15 21 | 15 45 | 16 8  | 16 31 | 16 54 |     |     |
| 16 | 14 43 | 15 7               | 15 30 | 15 53 | 16 16 | 16 40 | 17 3  | 17 26 | 17 49 |     |     |
| 17 | 15 39 | 16 2               | 16 25 | 16 48 | 17 11 | 17 35 | 17 58 | 18 21 | 18 44 |     |     |
| 18 | 16 35 | 16 59              | 17 21 | 17 44 | 18 7  | 18 30 | 18 53 | 19 16 | 19 39 |     |     |
| 19 | 17 31 | 17 54              | 18 17 | 18 40 | 19 2  | 19 25 | 19 48 | 20 11 | 20 34 |     |     |
| 20 | 18 27 | 18 50              | 19 13 | 19 36 | 19 58 | 20 21 | 20 43 | 21 6  | 21 29 |     |     |
| 21 | 19 23 | 19 46              | 20 9  | 20 32 | 20 54 | 21 17 | 21 39 | 22 2  | 22 24 |     |     |
| 22 | 20 19 | 20 42              | 21 5  | 21 28 | 21 50 | 22 12 | 22 34 | 22 57 | 23 19 |     |     |
| 23 | 21 15 | 21 38              | 22 1  | 22 24 | 22 46 | 23 8  | 23 30 | 23 52 | 24 14 |     |     |
| 24 | 22 12 | 22 35              | 22 57 | 23 20 | 23 42 | 24 4  | 24 26 | 24 48 | 25 10 |     |     |
| 25 | 23 9  | 23 31              | 23 53 | 24 16 | 24 38 | 25 0  | 25 21 | 25 43 | 26 5  |     |     |
| 26 | 24 6  | 24 28              | 24 50 | 25 12 | 25 34 | 25 56 | 26 17 | 26 39 | 27 0  |     |     |
| 27 | 25 3  | 25 25              | 25 47 | 26 9  | 26 30 | 26 52 | 27 13 | 27 35 | 27 56 |     |     |
| 28 | 26 0  | 26 22              | 26 43 | 27 5  | 27 26 | 27 47 | 28 9  | 28 30 | 28 51 |     |     |
| 29 | 26 57 | 27 19              | 27 40 | 28 1  | 28 22 | 28 44 | 29 5  | 29 26 | 29 47 |     |     |
| 30 | 27 54 | 28 16              | 28 37 | 28 58 | 29 19 | 29 40 | 30 1  | 30 22 | 30 43 |     |     |

D B 1



# Residuum Tabule

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 8                        | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     |       |
| S                        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | m     |
| 0                        | 24 56 | 25 19 | 25 42 | 26 5  | 26 27 | 26 49 | 27 11 | 27 33 | 27 54 |
| 1                        | 25 54 | 26 17 | 26 40 | 27 3  | 27 25 | 27 47 | 28 8  | 28 30 | 28 51 |
| 2                        | 26 53 | 27 16 | 27 38 | 28 1  | 28 23 | 28 45 | 29 6  | 29 27 | 29 49 |
| 3                        | 27 52 | 28 15 | 28 37 | 28 59 | 29 21 | 29 43 | 30 4  | 30 25 | 30 46 |
| 4                        | 28 51 | 29 14 | 29 36 | 29 58 | 30 19 | 30 41 | 31 2  | 31 23 | 31 44 |
| 5                        | 29 50 | 30 13 | 30 35 | 30 57 | 31 18 | 31 39 | 32 0  | 32 21 | 32 42 |
| 6                        | 30 50 | 31 12 | 31 34 | 31 56 | 32 17 | 32 38 | 32 59 | 33 20 | 33 40 |
| 7                        | 31 50 | 32 12 | 32 33 | 32 55 | 33 16 | 33 37 | 33 58 | 34 18 | 34 39 |
| 8                        | 32 50 | 33 12 | 33 33 | 33 54 | 34 15 | 34 36 | 34 57 | 35 17 | 35 37 |
| 9                        | 33 51 | 34 12 | 34 33 | 34 54 | 35 15 | 35 36 | 35 56 | 36 16 | 36 36 |
| 10                       | 34 51 | 35 12 | 35 33 | 35 54 | 36 15 | 36 35 | 36 55 | 37 15 | 37 35 |
| 11                       | 35 52 | 36 13 | 36 33 | 36 54 | 37 15 | 37 35 | 37 54 | 38 14 | 38 34 |
| 12                       | 36 53 | 37 14 | 37 34 | 37 55 | 38 15 | 38 35 | 38 54 | 39 14 | 39 33 |
| 13                       | 37 54 | 38 15 | 38 35 | 38 56 | 39 15 | 39 35 | 39 54 | 40 13 | 40 32 |
| 14                       | 38 56 | 39 16 | 39 36 | 39 57 | 40 16 | 40 35 | 40 54 | 41 13 | 41 31 |
| 15                       | 39 58 | 40 18 | 40 38 | 40 58 | 41 17 | 41 36 | 41 54 | 42 13 | 42 31 |
| 16                       | 41 0  | 41 19 | 41 39 | 41 59 | 42 18 | 42 36 | 42 54 | 43 13 | 43 31 |
| 17                       | 42 2  | 42 21 | 42 40 | 43 0  | 43 19 | 43 37 | 43 55 | 44 13 | 44 31 |
| 18                       | 43 4  | 43 23 | 43 42 | 44 1  | 44 20 | 44 38 | 44 56 | 45 14 | 45 31 |
| 19                       | 44 7  | 44 25 | 44 44 | 45 3  | 45 21 | 45 39 | 45 57 | 46 14 | 46 32 |
| 20                       | 45 10 | 45 28 | 45 46 | 46 5  | 46 23 | 46 40 | 46 58 | 47 15 | 47 33 |
| 21                       | 46 13 | 46 31 | 46 49 | 47 7  | 47 25 | 47 42 | 47 59 | 48 16 | 48 33 |
| 22                       | 47 16 | 47 34 | 47 52 | 48 9  | 48 27 | 48 44 | 49 0  | 49 17 | 49 34 |
| 23                       | 48 20 | 48 37 | 48 55 | 49 12 | 49 29 | 49 46 | 50 2  | 50 18 | 50 35 |
| 24                       | 49 24 | 49 41 | 49 58 | 50 15 | 50 32 | 50 48 | 51 4  | 51 20 | 51 36 |
| 25                       | 50 28 | 50 45 | 51 2  | 51 18 | 51 35 | 51 51 | 52 6  | 52 22 | 52 38 |
| 26                       | 51 33 | 51 49 | 52 6  | 52 22 | 52 38 | 52 54 | 53 9  | 53 24 | 53 40 |
| 27                       | 52 38 | 52 54 | 53 10 | 53 26 | 53 42 | 53 57 | 54 12 | 54 27 | 54 42 |
| 28                       | 53 43 | 53 58 | 54 14 | 54 30 | 54 45 | 55 0  | 55 15 | 55 29 | 55 44 |
| 29                       | 54 48 | 55 3  | 55 18 | 55 34 | 55 49 | 56 3  | 56 18 | 56 32 | 56 46 |
| 30                       | 55 53 | 56 8  | 56 23 | 56 38 | 56 53 | 57 7  | 57 21 | 57 35 | 57 48 |



# Leli Mediationum

## Latitudo Meridiana

| 8  | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| S  | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 0  | 27 54 | 28 16 | 28 37 | 28 58 | 29 19 | 29 40 | 30 1  | 30 22 | 30 43 |
| 1  | 28 51 | 29 13 | 29 34 | 29 55 | 30 16 | 30 37 | 30 57 | 31 18 | 31 39 |
| 2  | 29 49 | 30 10 | 30 31 | 30 52 | 31 13 | 31 34 | 31 54 | 32 14 | 32 35 |
| 3  | 30 46 | 31 7  | 31 28 | 31 49 | 32 10 | 32 31 | 32 51 | 33 11 | 33 31 |
| 4  | 31 44 | 32 5  | 32 25 | 32 46 | 33 7  | 33 27 | 33 47 | 34 7  | 34 27 |
| 5  | 32 42 | 33 3  | 33 23 | 33 43 | 34 4  | 34 24 | 34 44 | 35 4  | 35 23 |
| 6  | 33 40 | 34 1  | 34 21 | 34 41 | 35 1  | 35 21 | 35 41 | 36 1  | 36 20 |
| 7  | 34 39 | 34 59 | 35 19 | 35 39 | 35 58 | 36 18 | 36 38 | 36 57 | 37 16 |
| 8  | 35 37 | 35 57 | 36 17 | 36 37 | 36 56 | 37 15 | 37 35 | 37 54 | 38 13 |
| 9  | 36 36 | 36 56 | 37 15 | 37 35 | 37 54 | 38 13 | 38 32 | 38 51 | 39 10 |
| 10 | 37 35 | 37 54 | 38 13 | 38 33 | 38 52 | 39 11 | 39 29 | 39 48 | 40 7  |
| 11 | 38 34 | 38 53 | 39 12 | 39 31 | 39 50 | 40 9  | 40 27 | 40 45 | 41 4  |
| 12 | 39 33 | 39 52 | 40 11 | 40 30 | 40 48 | 41 7  | 41 25 | 41 43 | 42 1  |
| 13 | 40 32 | 40 51 | 41 10 | 41 28 | 41 46 | 42 5  | 42 23 | 42 41 | 42 58 |
| 14 | 41 31 | 41 50 | 42 9  | 42 27 | 42 45 | 43 3  | 43 21 | 43 39 | 43 56 |
| 15 | 42 31 | 42 50 | 43 8  | 43 26 | 43 44 | 44 2  | 44 19 | 44 37 | 44 54 |
| 16 | 43 31 | 43 49 | 44 7  | 44 25 | 44 43 | 45 0  | 45 17 | 45 35 | 45 51 |
| 17 | 44 31 | 44 49 | 45 6  | 45 24 | 45 42 | 45 59 | 46 15 | 46 33 | 46 49 |
| 18 | 45 41 | 45 49 | 46 6  | 46 23 | 46 41 | 46 58 | 47 14 | 47 31 | 47 47 |
| 19 | 46 32 | 46 49 | 47 6  | 47 23 | 47 40 | 47 57 | 48 13 | 48 29 | 48 45 |
| 20 | 47 33 | 47 49 | 48 6  | 48 24 | 48 39 | 48 56 | 49 12 | 49 28 | 49 43 |
| 21 | 48 33 | 48 50 | 49 6  | 49 23 | 49 39 | 49 55 | 50 11 | 50 27 | 50 42 |
| 22 | 49 34 | 49 50 | 50 6  | 50 23 | 50 38 | 50 54 | 51 10 | 51 25 | 51 40 |
| 23 | 50 35 | 50 51 | 51 6  | 51 23 | 51 38 | 51 53 | 52 9  | 52 24 | 52 38 |
| 24 | 51 36 | 51 52 | 52 7  | 52 23 | 52 38 | 52 53 | 53 8  | 53 23 | 53 37 |
| 25 | 52 38 | 52 53 | 53 8  | 53 24 | 53 38 | 53 53 | 54 8  | 54 22 | 54 36 |
| 26 | 53 40 | 53 55 | 54 9  | 54 24 | 54 38 | 54 53 | 55 7  | 55 21 | 55 35 |
| 27 | 54 42 | 54 57 | 55 11 | 55 25 | 55 39 | 55 53 | 56 7  | 56 21 | 56 34 |
| 28 | 55 44 | 55 58 | 56 12 | 56 26 | 56 40 | 56 54 | 57 7  | 57 20 | 57 33 |
| 29 | 56 46 | 57 0  | 57 13 | 57 27 | 57 41 | 57 54 | 58 7  | 58 20 | 58 32 |
| 30 | 57 48 | 58 2  | 58 15 | 58 29 | 58 42 | 58 55 | 59 7  | 59 20 | 59 32 |



# Residuum Tabule

| Latitudo Septentrionalis |       |       |       |       |       |       |       |       |       |  |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| °                        | 8     | 7     | 6     | 5     | 4     | 3     | 2     | 1     | 0     |  |
| °                        | 8 m   | 7 m   | 6 m   | 5 m   | 4 m   | 3 m   | 2 m   | 1 m   | 0 m   |  |
| 0                        | 55 53 | 56 8  | 56 23 | 56 38 | 56 53 | 57 7  | 57 21 | 57 35 | 57 48 |  |
| 1                        | 56 59 | 57 13 | 57 28 | 57 42 | 57 57 | 58 10 | 58 24 | 58 38 | 58 51 |  |
| 2                        | 58 5  | 58 19 | 58 33 | 58 47 | 59 1  | 59 14 | 59 27 | 59 41 | 59 54 |  |
| 3                        | 59 11 | 59 25 | 59 38 | 59 52 | 60 5  | 60 18 | 60 31 | 60 44 | 60 57 |  |
| 4                        | 60 17 | 60 31 | 60 44 | 60 57 | 61 10 | 61 22 | 61 35 | 61 47 | 62 0  |  |
| 5                        | 61 24 | 61 37 | 61 50 | 62 2  | 62 15 | 62 27 | 62 39 | 62 51 | 63 3  |  |
| 6                        | 62 31 | 62 44 | 62 56 | 63 8  | 63 20 | 63 32 | 63 43 | 63 55 | 64 6  |  |
| 7                        | 63 38 | 63 50 | 64 2  | 64 13 | 64 25 | 64 37 | 64 47 | 64 59 | 65 9  |  |
| 8                        | 64 45 | 64 56 | 65 8  | 65 19 | 65 30 | 65 42 | 65 52 | 66 3  | 66 13 |  |
| 9                        | 65 52 | 66 3  | 66 14 | 66 25 | 66 36 | 66 47 | 66 57 | 67 7  | 67 17 |  |
| 10                       | 67 0  | 67 10 | 67 21 | 67 31 | 67 42 | 67 52 | 68 2  | 68 11 | 68 21 |  |
| 11                       | 68 8  | 68 18 | 68 28 | 68 38 | 68 48 | 68 57 | 69 7  | 69 16 | 69 25 |  |
| 12                       | 69 16 | 69 26 | 69 35 | 69 45 | 69 54 | 70 3  | 70 12 | 70 21 | 70 29 |  |
| 13                       | 70 24 | 70 33 | 70 42 | 70 51 | 71 0  | 71 9  | 71 17 | 71 26 | 71 33 |  |
| 14                       | 71 32 | 71 41 | 71 49 | 71 58 | 72 6  | 72 15 | 72 22 | 72 31 | 72 38 |  |
| 15                       | 72 41 | 72 49 | 72 57 | 73 5  | 73 13 | 73 21 | 73 28 | 73 36 | 73 43 |  |
| 16                       | 73 49 | 73 57 | 74 4  | 74 12 | 74 19 | 74 27 | 74 33 | 74 40 | 74 47 |  |
| 17                       | 74 58 | 75 5  | 75 12 | 75 19 | 75 26 | 75 33 | 75 39 | 75 41 | 75 52 |  |
| 18                       | 76 7  | 76 14 | 76 20 | 76 27 | 76 33 | 76 39 | 76 45 | 76 51 | 76 57 |  |
| 19                       | 77 16 | 77 22 | 77 28 | 77 34 | 77 40 | 77 45 | 77 51 | 77 56 | 78 2  |  |
| 20                       | 78 25 | 78 30 | 78 36 | 78 41 | 78 47 | 78 52 | 78 57 | 79 2  | 79 7  |  |
| 21                       | 79 34 | 79 39 | 79 44 | 79 49 | 79 54 | 79 59 | 80 3  | 80 8  | 80 12 |  |
| 22                       | 80 43 | 80 48 | 80 52 | 80 50 | 81 1  | 81 5  | 81 9  | 81 13 | 81 17 |  |
| 23                       | 81 52 | 81 57 | 82 0  | 82 4  | 82 8  | 82 11 | 82 15 | 82 18 | 82 22 |  |
| 24                       | 83 2  | 83 6  | 83 9  | 83 12 | 83 15 | 83 18 | 83 21 | 83 34 | 83 27 |  |
| 25                       | 84 11 | 84 15 | 84 17 | 84 20 | 84 22 | 84 25 | 84 27 | 84 30 | 84 33 |  |
| 26                       | 85 21 | 85 24 | 85 25 | 85 28 | 85 29 | 85 32 | 85 33 | 85 36 | 85 38 |  |
| 27                       | 86 31 | 86 33 | 86 34 | 86 36 | 86 37 | 86 39 | 86 40 | 86 42 | 86 43 |  |
| 28                       | 87 40 | 87 42 | 87 42 | 87 44 | 87 44 | 87 46 | 87 46 | 87 48 | 87 48 |  |
| 29                       | 88 50 | 88 51 | 88 51 | 88 52 | 88 52 | 88 52 | 88 53 | 88 54 | 88 54 |  |
| 30                       | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  |  |



# Tab. Mediarum

| Latitudo Meridiana |       |       |       |       |       |       |       |       |       |     |     |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| II                 | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |     |     |
| B                  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m | B m |
| 0                  | 57 48 | 58 2  | 58 15 | 58 29 | 58 42 | 58 55 | 59 7  | 59 20 | 59 32 |     |     |
| 1                  | 58 51 | 59 4  | 59 17 | 59 30 | 59 43 | 59 55 | 60 7  | 60 20 | 60 32 |     |     |
| 2                  | 59 54 | 60 6  | 60 19 | 60 31 | 60 44 | 60 56 | 61 8  | 61 20 | 61 32 |     |     |
| 3                  | 60 57 | 61 9  | 61 21 | 61 33 | 61 46 | 61 57 | 62 9  | 62 21 | 62 32 |     |     |
| 4                  | 62 0  | 62 11 | 62 23 | 62 35 | 62 48 | 62 58 | 63 9  | 63 21 | 63 32 |     |     |
| 5                  | 63 3  | 63 14 | 63 25 | 63 37 | 63 50 | 63 59 | 64 10 | 64 21 | 64 32 |     |     |
| 6                  | 64 6  | 64 17 | 64 28 | 64 39 | 64 52 | 65 1  | 65 11 | 65 22 | 65 32 |     |     |
| 7                  | 65 9  | 65 20 | 65 31 | 65 41 | 65 54 | 66 2  | 66 12 | 66 22 | 66 32 |     |     |
| 8                  | 66 13 | 66 23 | 66 34 | 66 44 | 66 56 | 67 4  | 67 13 | 67 23 | 67 33 |     |     |
| 9                  | 67 17 | 67 27 | 67 37 | 67 47 | 67 58 | 68 6  | 68 15 | 68 24 | 68 33 |     |     |
| 10                 | 68 21 | 68 30 | 68 40 | 68 49 | 68 59 | 69 7  | 69 16 | 69 25 | 69 33 |     |     |
| 11                 | 69 25 | 69 34 | 69 43 | 69 52 | 70 1  | 70 9  | 70 17 | 70 26 | 70 34 |     |     |
| 12                 | 70 29 | 70 38 | 70 46 | 70 55 | 71 3  | 71 11 | 71 19 | 71 27 | 71 35 |     |     |
| 13                 | 71 33 | 71 42 | 71 49 | 71 58 | 72 5  | 72 13 | 72 21 | 72 28 | 72 36 |     |     |
| 14                 | 72 38 | 72 46 | 72 53 | 73 1  | 73 8  | 73 15 | 73 23 | 73 30 | 73 37 |     |     |
| 15                 | 73 43 | 73 50 | 73 57 | 74 4  | 74 11 | 74 18 | 74 25 | 74 32 | 74 38 |     |     |
| 16                 | 74 47 | 74 54 | 75 1  | 75 7  | 75 14 | 75 20 | 75 27 | 75 33 | 75 39 |     |     |
| 17                 | 75 52 | 75 58 | 76 5  | 76 11 | 76 17 | 76 23 | 76 29 | 76 35 | 76 40 |     |     |
| 18                 | 76 57 | 77 3  | 77 9  | 77 15 | 77 20 | 77 26 | 77 31 | 77 37 | 77 42 |     |     |
| 19                 | 78 2  | 78 7  | 78 13 | 78 18 | 78 23 | 78 28 | 78 33 | 78 38 | 78 43 |     |     |
| 20                 | 79 7  | 79 12 | 79 17 | 79 21 | 79 26 | 79 31 | 79 35 | 79 40 | 79 44 |     |     |
| 21                 | 80 12 | 80 17 | 80 21 | 80 25 | 80 29 | 80 34 | 80 38 | 80 42 | 80 46 |     |     |
| 22                 | 81 17 | 81 21 | 81 25 | 81 28 | 81 32 | 81 36 | 81 40 | 81 44 | 81 47 |     |     |
| 23                 | 82 22 | 82 25 | 82 29 | 82 32 | 82 35 | 82 39 | 82 42 | 82 46 | 82 48 |     |     |
| 24                 | 83 27 | 83 30 | 83 33 | 83 36 | 83 39 | 83 42 | 83 45 | 83 48 | 83 50 |     |     |
| 25                 | 84 33 | 84 35 | 84 37 | 84 40 | 84 42 | 84 45 | 84 47 | 84 50 | 84 51 |     |     |
| 26                 | 85 38 | 85 40 | 85 41 | 85 44 | 85 45 | 85 48 | 85 49 | 85 52 | 85 53 |     |     |
| 27                 | 86 43 | 86 45 | 86 46 | 86 48 | 86 49 | 86 51 | 86 52 | 86 54 | 86 55 |     |     |
| 28                 | 87 48 | 87 50 | 87 50 | 87 52 | 87 52 | 87 54 | 87 54 | 87 56 | 87 56 |     |     |
| 29                 | 88 54 | 88 55 | 88 55 | 88 56 | 88 56 | 88 57 | 88 57 | 88 58 | 88 58 |     |     |
| 30                 | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  | 90 0  |     |     |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Gr                       | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| D                        | D m    | D m    | D m    | D m    | D m    | D m    | D m    | D m    | D m    |
| 0                        | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   |
| 1                        | 91 10  | 91 9   | 91 9   | 91 8   | 91 8   | 91 7   | 91 7   | 91 6   | 91 6   |
| 2                        | 92 20  | 92 18  | 92 18  | 92 16  | 92 16  | 92 14  | 92 14  | 92 12  | 92 12  |
| 3                        | 93 29  | 93 27  | 93 26  | 93 24  | 93 23  | 93 21  | 93 20  | 93 18  | 93 17  |
| 4                        | 94 39  | 94 36  | 94 35  | 94 32  | 94 31  | 94 28  | 94 27  | 94 24  | 94 22  |
| 5                        | 95 49  | 95 45  | 95 43  | 95 40  | 95 38  | 95 35  | 95 33  | 95 30  | 95 27  |
| 6                        | 96 58  | 96 54  | 96 51  | 96 48  | 96 45  | 96 42  | 96 39  | 96 36  | 96 33  |
| 7                        | 98 8   | 98 3   | 98 0   | 97 56  | 97 52  | 97 49  | 97 45  | 97 42  | 97 38  |
| 8                        | 99 17  | 99 12  | 99 8   | 99 4   | 98 59  | 98 55  | 98 51  | 98 47  | 98 43  |
| 9                        | 100 26 | 100 21 | 100 16 | 100 11 | 100 6  | 100 1  | 99 57  | 99 52  | 99 48  |
| 10                       | 101 35 | 101 30 | 101 24 | 101 19 | 101 13 | 101 8  | 101 3  | 100 58 | 100 53 |
| 11                       | 102 44 | 102 38 | 102 32 | 102 26 | 102 20 | 102 15 | 102 9  | 102 4  | 101 58 |
| 12                       | 103 53 | 103 46 | 103 40 | 103 31 | 103 27 | 103 21 | 103 15 | 103 9  | 103 3  |
| 13                       | 105 2  | 104 55 | 104 48 | 104 41 | 104 34 | 104 27 | 104 21 | 104 14 | 104 8  |
| 14                       | 106 11 | 106 3  | 105 56 | 105 48 | 105 41 | 105 33 | 105 27 | 105 19 | 105 13 |
| 15                       | 107 19 | 107 11 | 107 3  | 106 55 | 106 47 | 106 39 | 106 32 | 106 24 | 106 17 |
| 16                       | 108 28 | 108 19 | 108 11 | 108 2  | 107 54 | 107 45 | 107 38 | 107 29 | 107 22 |
| 17                       | 109 36 | 109 27 | 109 18 | 109 9  | 109 0  | 108 51 | 108 43 | 108 34 | 108 27 |
| 18                       | 110 44 | 110 34 | 110 25 | 110 15 | 110 6  | 109 57 | 109 48 | 109 39 | 109 31 |
| 19                       | 111 52 | 111 42 | 111 32 | 111 22 | 111 12 | 111 3  | 110 53 | 110 44 | 110 35 |
| 20                       | 113 0  | 112 50 | 112 39 | 112 29 | 112 18 | 112 8  | 111 58 | 111 49 | 111 39 |
| 21                       | 114 8  | 113 57 | 113 46 | 113 35 | 113 24 | 113 13 | 113 3  | 112 53 | 112 43 |
| 22                       | 115 15 | 115 4  | 114 52 | 114 41 | 114 30 | 114 18 | 114 8  | 113 57 | 113 47 |
| 23                       | 116 22 | 116 10 | 115 58 | 115 47 | 115 35 | 115 23 | 115 13 | 115 1  | 114 51 |
| 24                       | 117 29 | 117 16 | 117 4  | 116 52 | 116 40 | 116 28 | 116 17 | 116 5  | 115 54 |
| 25                       | 118 36 | 118 23 | 118 10 | 117 58 | 117 45 | 117 33 | 117 21 | 117 9  | 116 57 |
| 26                       | 119 43 | 119 29 | 119 16 | 119 3  | 118 50 | 118 38 | 118 25 | 118 13 | 118 0  |
| 27                       | 120 49 | 120 35 | 120 22 | 120 8  | 119 55 | 119 42 | 119 29 | 119 16 | 119 3  |
| 28                       | 121 55 | 121 41 | 121 27 | 121 13 | 120 59 | 120 46 | 120 33 | 120 19 | 120 6  |
| 29                       | 123 1  | 122 47 | 122 32 | 122 18 | 122 3  | 121 50 | 121 36 | 121 22 | 121 9  |
| 30                       | 124 7  | 123 52 | 123 37 | 123 22 | 123 7  | 122 53 | 122 39 | 122 25 | 122 12 |



# Tab. Mediationum

| Latitudo Meridiana |        |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| E                  | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |        |
| S                  | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    |
| 0                  | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   | 90 0   |
| 1                  | 91 6   | 91 5   | 91 5   | 91 4   | 91 4   | 91 3   | 91 3   | 91 2   | 91 2   | 91 2   |
| 2                  | 92 12  | 92 10  | 92 10  | 92 8   | 92 8   | 92 6   | 92 6   | 92 4   | 92 4   | 92 4   |
| 3                  | 93 17  | 93 15  | 93 14  | 93 12  | 93 11  | 93 9   | 93 8   | 93 6   | 93 5   | 93 5   |
| 4                  | 94 22  | 94 20  | 94 19  | 94 16  | 94 15  | 94 12  | 94 11  | 94 8   | 94 7   | 94 7   |
| 5                  | 95 27  | 95 25  | 95 23  | 95 20  | 95 18  | 95 15  | 95 13  | 95 10  | 95 9   | 95 9   |
| 6                  | 96 33  | 96 30  | 96 27  | 96 24  | 96 21  | 96 18  | 96 15  | 86 12  | 96 10  | 96 10  |
| 7                  | 97 38  | 97 35  | 97 31  | 97 28  | 97 25  | 97 21  | 97 18  | 97 14  | 97 12  | 97 12  |
| 8                  | 98 43  | 98 39  | 98 35  | 98 32  | 98 28  | 98 24  | 98 20  | 98 16  | 98 13  | 98 13  |
| 9                  | 99 48  | 99 43  | 99 39  | 99 35  | 99 31  | 99 26  | 99 22  | 99 18  | 89 14  | 99 14  |
| 10                 | 100 53 | 100 48 | 100 43 | 100 39 | 100 34 | 100 29 | 100 25 | 100 20 | 100 16 | 100 16 |
| 11                 | 101 58 | 101 53 | 101 47 | 101 42 | 101 37 | 101 32 | 101 27 | 101 22 | 101 17 | 101 17 |
| 12                 | 103 3  | 102 57 | 102 51 | 102 45 | 102 40 | 102 34 | 102 29 | 102 23 | 102 18 | 102 18 |
| 13                 | 104 8  | 104 3  | 103 55 | 103 49 | 103 43 | 103 37 | 103 31 | 103 25 | 103 20 | 103 20 |
| 14                 | 105 13 | 105 6  | 104 59 | 104 53 | 104 46 | 104 40 | 104 33 | 104 27 | 104 21 | 104 21 |
| 15                 | 106 17 | 106 10 | 106 3  | 105 56 | 105 49 | 105 42 | 105 35 | 105 28 | 105 22 | 105 22 |
| 16                 | 107 22 | 107 14 | 107 7  | 106 59 | 106 52 | 106 45 | 106 37 | 106 30 | 106 23 | 106 23 |
| 17                 | 108 27 | 108 18 | 108 11 | 108 2  | 107 55 | 107 47 | 107 39 | 107 32 | 107 24 | 107 24 |
| 18                 | 109 31 | 109 22 | 109 14 | 109 5  | 108 57 | 108 49 | 108 41 | 108 33 | 108 25 | 108 25 |
| 19                 | 110 35 | 110 26 | 110 17 | 110 8  | 110 0  | 109 51 | 109 43 | 109 34 | 109 26 | 109 26 |
| 20                 | 111 39 | 111 30 | 111 20 | 111 11 | 111 2  | 110 53 | 110 44 | 110 35 | 110 27 | 110 27 |
| 21                 | 112 43 | 112 33 | 112 23 | 112 13 | 112 4  | 111 54 | 111 45 | 111 36 | 111 27 | 111 27 |
| 22                 | 113 47 | 113 37 | 113 26 | 113 16 | 113 6  | 112 56 | 112 47 | 112 37 | 112 27 | 112 27 |
| 23                 | 114 51 | 114 40 | 114 29 | 114 19 | 114 8  | 113 58 | 113 48 | 113 38 | 113 28 | 113 28 |
| 24                 | 115 54 | 115 43 | 115 32 | 115 21 | 115 10 | 114 59 | 114 49 | 114 38 | 114 28 | 114 28 |
| 25                 | 116 57 | 116 46 | 116 35 | 116 23 | 116 12 | 116 1  | 115 50 | 115 39 | 115 28 | 115 28 |
| 26                 | 118 0  | 117 49 | 117 37 | 117 25 | 117 14 | 117 2  | 116 51 | 116 39 | 116 28 | 116 28 |
| 27                 | 119 3  | 118 51 | 118 39 | 118 27 | 118 15 | 118 3  | 117 51 | 117 39 | 117 28 | 117 28 |
| 28                 | 120 6  | 119 54 | 119 41 | 119 29 | 119 16 | 119 4  | 118 52 | 118 40 | 118 28 | 118 28 |
| 29                 | 121 9  | 120 56 | 120 43 | 120 30 | 120 17 | 120 5  | 119 53 | 119 40 | 119 28 | 119 28 |
| 30                 | 122 12 | 121 58 | 121 45 | 121 31 | 121 18 | 121 5  | 120 53 | 120 40 | 120 28 | 120 28 |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| S m                      | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    |
| 0                        | 124 7  | 123 52 | 123 37 | 123 22 | 123 7  | 122 53 | 122 39 | 122 25 | 122 12 |
| 1                        | 125 12 | 124 57 | 124 42 | 124 26 | 124 11 | 123 57 | 123 42 | 123 28 | 123 14 |
| 2                        | 126 17 | 126 2  | 125 46 | 125 30 | 125 15 | 125 0  | 124 45 | 124 31 | 124 16 |
| 3                        | 127 22 | 127 6  | 126 50 | 126 34 | 126 18 | 126 3  | 125 48 | 125 33 | 125 18 |
| 4                        | 128 27 | 128 11 | 127 54 | 127 38 | 127 22 | 127 6  | 126 51 | 126 36 | 126 20 |
| 5                        | 129 32 | 129 15 | 128 58 | 128 42 | 128 25 | 128 9  | 127 54 | 127 38 | 127 22 |
| 6                        | 130 36 | 130 19 | 130 2  | 129 45 | 129 28 | 129 12 | 128 56 | 128 40 | 128 24 |
| 7                        | 131 40 | 131 23 | 131 5  | 130 48 | 130 31 | 130 14 | 129 58 | 129 42 | 129 25 |
| 8                        | 132 44 | 132 26 | 132 8  | 131 51 | 131 33 | 131 16 | 131 0  | 130 43 | 130 26 |
| 9                        | 133 47 | 133 29 | 133 11 | 132 53 | 132 35 | 132 18 | 132 1  | 131 44 | 131 27 |
| 10                       | 134 50 | 134 32 | 134 14 | 133 55 | 133 37 | 133 20 | 133 2  | 132 45 | 132 27 |
| 11                       | 135 53 | 135 35 | 135 16 | 134 57 | 134 39 | 134 21 | 134 3  | 133 46 | 133 28 |
| 12                       | 136 56 | 136 37 | 136 18 | 135 59 | 135 40 | 135 22 | 135 4  | 134 47 | 134 29 |
| 13                       | 137 58 | 137 39 | 137 20 | 137 0  | 136 41 | 136 23 | 136 5  | 135 47 | 135 29 |
| 14                       | 139 0  | 138 41 | 138 21 | 138 1  | 137 42 | 137 24 | 137 6  | 136 47 | 136 29 |
| 15                       | 140 2  | 139 42 | 139 22 | 139 2  | 138 43 | 138 24 | 138 6  | 137 47 | 137 29 |
| 16                       | 141 4  | 140 44 | 140 24 | 140 3  | 139 44 | 139 25 | 139 6  | 138 47 | 138 29 |
| 17                       | 142 6  | 141 45 | 141 25 | 141 4  | 140 45 | 140 25 | 140 6  | 139 47 | 139 28 |
| 18                       | 143 7  | 142 46 | 142 26 | 142 5  | 141 45 | 141 25 | 141 6  | 140 46 | 140 27 |
| 19                       | 144 8  | 143 47 | 143 27 | 143 6  | 142 45 | 142 25 | 142 6  | 141 46 | 141 26 |
| 20                       | 145 9  | 144 48 | 144 27 | 144 6  | 143 45 | 143 25 | 143 5  | 142 45 | 142 25 |
| 21                       | 146 9  | 145 48 | 145 27 | 145 6  | 144 45 | 144 24 | 144 4  | 143 44 | 143 24 |
| 22                       | 147 10 | 146 48 | 146 27 | 146 6  | 145 45 | 145 24 | 145 3  | 144 43 | 144 23 |
| 23                       | 148 10 | 147 48 | 147 27 | 147 5  | 146 44 | 146 23 | 146 2  | 145 42 | 145 21 |
| 24                       | 149 10 | 148 48 | 148 26 | 148 4  | 147 43 | 147 22 | 147 1  | 146 40 | 146 20 |
| 25                       | 150 10 | 149 47 | 149 25 | 149 3  | 148 42 | 148 21 | 148 0  | 147 39 | 147 18 |
| 26                       | 151 9  | 150 46 | 150 24 | 150 2  | 149 41 | 149 19 | 148 58 | 148 37 | 148 16 |
| 27                       | 152 8  | 151 45 | 151 23 | 151 1  | 150 39 | 150 17 | 149 56 | 149 35 | 149 14 |
| 28                       | 153 7  | 152 44 | 152 22 | 151 59 | 151 37 | 151 15 | 150 54 | 150 33 | 150 11 |
| 29                       | 154 6  | 153 43 | 153 20 | 152 57 | 152 35 | 152 13 | 151 52 | 151 30 | 151 9  |
| 30                       | 155 4  | 154 41 | 154 18 | 153 55 | 153 33 | 153 11 | 152 49 | 152 27 | 152 6  |



# Seli Mediationum

## Latitudo Meridiana

| Ω  | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 122 12 | 121 58 | 121 45 | 121 31 | 121 18 | 121 5  | 120 53 | 120 40 | 120 28 |
| 1  | 123 14 | 123 0  | 122 47 | 122 33 | 122 19 | 122 6  | 121 53 | 121 40 | 121 28 |
| 2  | 124 16 | 124 2  | 123 48 | 123 34 | 123 20 | 123 6  | 122 53 | 122 40 | 122 27 |
| 3  | 125 18 | 125 3  | 124 49 | 124 35 | 124 21 | 124 7  | 123 53 | 123 39 | 123 26 |
| 4  | 126 20 | 126 5  | 125 51 | 125 36 | 125 22 | 125 7  | 124 53 | 124 39 | 124 25 |
| 5  | 127 22 | 127 7  | 126 52 | 126 36 | 126 22 | 126 7  | 125 52 | 125 38 | 125 24 |
| 6  | 128 24 | 128 8  | 127 53 | 127 37 | 127 22 | 127 7  | 126 52 | 126 37 | 126 23 |
| 7  | 129 25 | 129 9  | 128 54 | 128 37 | 128 22 | 128 7  | 127 51 | 127 36 | 127 22 |
| 8  | 130 26 | 130 10 | 129 54 | 129 37 | 129 22 | 129 6  | 128 50 | 128 35 | 128 20 |
| 9  | 131 27 | 131 10 | 130 54 | 130 37 | 130 21 | 130 5  | 129 49 | 129 33 | 129 18 |
| 10 | 132 27 | 132 11 | 131 54 | 131 37 | 131 21 | 131 4  | 130 48 | 130 32 | 130 17 |
| 11 | 133 28 | 133 11 | 132 54 | 132 37 | 132 20 | 132 3  | 131 47 | 131 31 | 131 15 |
| 12 | 134 29 | 134 11 | 133 54 | 133 37 | 133 19 | 133 2  | 132 46 | 132 29 | 132 13 |
| 13 | 135 29 | 135 11 | 134 54 | 134 36 | 134 18 | 134 1  | 133 45 | 133 27 | 133 11 |
| 14 | 136 29 | 136 11 | 135 53 | 135 35 | 135 17 | 135 0  | 134 43 | 134 25 | 134 9  |
| 15 | 137 29 | 137 10 | 136 52 | 136 34 | 136 16 | 135 58 | 135 41 | 135 23 | 135 6  |
| 16 | 138 29 | 138 10 | 137 51 | 137 33 | 137 15 | 136 57 | 136 39 | 136 21 | 136 4  |
| 17 | 139 28 | 139 9  | 138 50 | 138 32 | 138 14 | 137 55 | 137 37 | 137 19 | 137 2  |
| 18 | 140 27 | 140 8  | 139 49 | 139 30 | 139 12 | 138 53 | 138 35 | 138 17 | 137 59 |
| 19 | 141 26 | 141 7  | 140 48 | 140 29 | 140 10 | 139 51 | 139 33 | 139 15 | 138 56 |
| 20 | 142 25 | 142 6  | 141 47 | 141 27 | 141 8  | 140 49 | 140 31 | 140 12 | 139 53 |
| 21 | 143 24 | 143 4  | 142 45 | 142 25 | 142 6  | 141 47 | 141 28 | 141 9  | 140 50 |
| 22 | 144 23 | 144 3  | 143 43 | 143 23 | 143 4  | 142 45 | 142 25 | 142 6  | 141 47 |
| 23 | 145 21 | 145 1  | 144 41 | 144 21 | 144 2  | 143 42 | 143 22 | 143 3  | 142 44 |
| 24 | 146 20 | 145 59 | 145 39 | 145 19 | 144 59 | 144 39 | 144 19 | 143 59 | 143 40 |
| 25 | 147 18 | 146 57 | 146 37 | 146 17 | 145 56 | 145 36 | 145 16 | 144 56 | 144 37 |
| 26 | 148 16 | 147 55 | 147 35 | 147 14 | 146 53 | 146 33 | 146 13 | 145 53 | 145 33 |
| 27 | 149 14 | 148 53 | 148 32 | 148 11 | 147 50 | 147 29 | 147 9  | 146 49 | 146 29 |
| 28 | 150 11 | 149 50 | 149 29 | 149 8  | 148 47 | 148 26 | 148 6  | 147 46 | 147 25 |
| 29 | 151 9  | 150 47 | 150 26 | 150 5  | 149 44 | 149 23 | 149 3  | 148 42 | 148 21 |
| 30 | 152 6  | 151 44 | 151 23 | 151 2  | 150 41 | 150 20 | 149 59 | 149 38 | 149 17 |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |     |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| np                       | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |     |
| S                        | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m |
| 0                        | 155 4  | 154 41 | 154 18 | 153 55 | 153 33 | 153 11 | 152 49 | 152 27 | 152 6  |     |
| 1                        | 156 3  | 155 39 | 155 16 | 154 53 | 154 31 | 154 9  | 153 47 | 153 25 | 153 3  |     |
| 2                        | 157 1  | 156 37 | 156 14 | 155 51 | 155 29 | 155 6  | 154 44 | 154 22 | 154 0  |     |
| 3                        | 157 59 | 157 35 | 157 12 | 156 49 | 156 26 | 156 3  | 155 41 | 155 19 | 154 57 |     |
| 4                        | 158 57 | 158 33 | 158 10 | 157 47 | 157 24 | 157 1  | 156 39 | 156 16 | 155 54 |     |
| 5                        | 159 55 | 159 31 | 159 8  | 158 44 | 158 21 | 157 58 | 157 36 | 157 13 | 156 51 |     |
| 6                        | 160 52 | 160 28 | 160 5  | 159 41 | 159 18 | 158 55 | 158 33 | 158 10 | 157 48 |     |
| 7                        | 161 49 | 161 25 | 161 2  | 160 38 | 160 15 | 159 52 | 159 30 | 159 7  | 158 45 |     |
| 8                        | 162 46 | 162 22 | 161 59 | 161 35 | 161 12 | 160 49 | 160 27 | 160 4  | 159 41 |     |
| 9                        | 163 43 | 163 19 | 162 56 | 162 32 | 162 9  | 161 46 | 161 23 | 161 0  | 160 37 |     |
| 10                       | 164 40 | 164 16 | 163 53 | 163 29 | 163 6  | 162 42 | 162 19 | 161 56 | 161 33 |     |
| 11                       | 165 37 | 165 13 | 164 49 | 164 25 | 164 2  | 163 38 | 163 15 | 162 52 | 162 29 |     |
| 12                       | 166 33 | 166 9  | 165 45 | 165 21 | 164 58 | 164 34 | 164 11 | 163 48 | 163 25 |     |
| 13                       | 167 30 | 167 6  | 166 42 | 166 18 | 165 54 | 165 30 | 165 7  | 164 44 | 164 21 |     |
| 14                       | 168 26 | 168 2  | 167 38 | 167 14 | 166 50 | 166 26 | 166 3  | 165 40 | 165 17 |     |
| 15                       | 169 22 | 168 58 | 168 34 | 168 10 | 167 46 | 167 22 | 166 59 | 166 35 | 166 12 |     |
| 16                       | 170 18 | 169 54 | 169 30 | 169 6  | 168 42 | 168 18 | 167 55 | 167 31 | 167 8  |     |
| 17                       | 171 14 | 170 50 | 170 26 | 170 2  | 169 38 | 169 14 | 168 51 | 168 27 | 168 3  |     |
| 18                       | 172 9  | 171 45 | 171 21 | 170 57 | 170 33 | 170 9  | 169 46 | 169 23 | 168 59 |     |
| 19                       | 173 5  | 172 41 | 172 17 | 171 53 | 171 29 | 171 5  | 170 42 | 170 18 | 169 54 |     |
| 20                       | 174 1  | 173 37 | 173 13 | 172 49 | 172 25 | 172 1  | 171 37 | 171 13 | 170 49 |     |
| 21                       | 174 56 | 174 32 | 174 8  | 173 44 | 173 20 | 172 56 | 172 32 | 172 9  | 171 45 |     |
| 22                       | 175 51 | 175 27 | 175 3  | 174 39 | 174 15 | 173 51 | 173 27 | 173 4  | 172 40 |     |
| 23                       | 176 46 | 176 22 | 175 58 | 175 34 | 175 10 | 174 46 | 174 22 | 173 58 | 173 37 |     |
| 24                       | 177 41 | 177 17 | 176 53 | 176 29 | 176 5  | 175 41 | 175 17 | 174 53 | 174 30 |     |
| 25                       | 178 36 | 178 12 | 177 48 | 177 24 | 177 0  | 176 36 | 176 12 | 175 48 | 175 25 |     |
| 26                       | 179 31 | 179 7  | 178 43 | 178 19 | 177 55 | 177 31 | 177 7  | 176 43 | 176 20 |     |
| 27                       | 180 26 | 180 2  | 179 38 | 179 14 | 178 50 | 178 26 | 178 2  | 177 38 | 177 15 |     |
| 28                       | 181 22 | 180 57 | 180 33 | 180 9  | 179 45 | 179 21 | 178 57 | 178 33 | 178 10 |     |
| 29                       | 182 17 | 181 52 | 181 28 | 181 4  | 180 40 | 180 16 | 179 52 | 179 28 | 179 5  |     |
| 30                       | 183 12 | 182 47 | 182 23 | 181 59 | 181 35 | 181 11 | 180 47 | 180 23 | 180 0  |     |



# Celi Mediationum

| Latitudo Meridiana |        |        |        |        |        |        |        |        |        |     |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| np                 | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |     |
| B                  | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m |
| 0                  | 152 6  | 151 44 | 151 23 | 151 2  | 150 41 | 150 20 | 149 59 | 149 38 | 149 17 |     |
| 1                  | 153 3  | 152 41 | 152 20 | 151 59 | 151 38 | 151 16 | 150 55 | 150 34 | 150 13 |     |
| 2                  | 154 0  | 153 38 | 153 17 | 152 55 | 152 34 | 152 12 | 151 51 | 151 30 | 151 9  |     |
| 3                  | 154 57 | 154 35 | 154 13 | 153 51 | 153 30 | 153 8  | 152 47 | 152 25 | 152 4  |     |
| 4                  | 155 54 | 155 32 | 155 10 | 154 48 | 154 26 | 154 4  | 153 43 | 153 21 | 153 0  |     |
| 5                  | 156 51 | 156 29 | 156 7  | 155 44 | 155 22 | 155 0  | 154 39 | 154 17 | 153 55 |     |
| 6                  | 157 48 | 157 25 | 157 3  | 156 40 | 156 18 | 155 56 | 155 34 | 155 12 | 154 50 |     |
| 7                  | 158 45 | 158 22 | 157 59 | 157 36 | 157 14 | 156 52 | 156 30 | 156 8  | 155 46 |     |
| 8                  | 159 41 | 159 18 | 158 55 | 158 32 | 158 10 | 157 48 | 157 26 | 157 3  | 156 41 |     |
| 9                  | 160 37 | 160 14 | 159 51 | 159 28 | 159 6  | 158 43 | 158 21 | 157 58 | 157 36 |     |
| 10                 | 161 33 | 161 10 | 160 47 | 160 24 | 160 2  | 159 39 | 159 17 | 158 54 | 158 31 |     |
| 11                 | 162 29 | 162 6  | 161 43 | 161 20 | 160 58 | 160 35 | 160 12 | 159 49 | 159 26 |     |
| 12                 | 163 25 | 163 2  | 162 39 | 162 16 | 161 53 | 161 30 | 161 7  | 160 44 | 160 21 |     |
| 13                 | 164 21 | 163 58 | 163 35 | 163 12 | 162 49 | 162 25 | 162 2  | 161 39 | 161 16 |     |
| 14                 | 165 17 | 164 53 | 164 30 | 164 7  | 163 44 | 163 20 | 162 57 | 162 34 | 162 11 |     |
| 15                 | 166 12 | 165 48 | 165 25 | 165 2  | 164 39 | 164 15 | 163 52 | 163 29 | 163 6  |     |
| 16                 | 167 8  | 166 44 | 166 21 | 165 57 | 165 34 | 165 10 | 164 47 | 164 24 | 164 1  |     |
| 17                 | 168 3  | 167 40 | 167 17 | 166 52 | 166 29 | 166 5  | 165 42 | 165 10 | 164 56 |     |
| 18                 | 168 59 | 168 35 | 168 12 | 167 47 | 167 24 | 167 0  | 166 37 | 166 13 | 165 51 |     |
| 19                 | 169 54 | 169 31 | 169 7  | 168 43 | 168 19 | 167 55 | 167 32 | 167 8  | 166 46 |     |
| 20                 | 170 49 | 170 26 | 170 2  | 169 38 | 169 14 | 168 50 | 168 27 | 168 3  | 167 41 |     |
| 21                 | 171 45 | 171 21 | 170 57 | 170 33 | 170 9  | 169 45 | 169 22 | 168 58 | 168 35 |     |
| 22                 | 172 40 | 172 16 | 171 52 | 171 28 | 171 4  | 170 40 | 170 17 | 169 53 | 169 30 |     |
| 23                 | 173 35 | 173 11 | 172 47 | 172 23 | 171 59 | 171 35 | 171 12 | 170 48 | 170 25 |     |
| 24                 | 174 30 | 174 6  | 173 42 | 173 18 | 172 54 | 172 30 | 172 7  | 171 43 | 171 20 |     |
| 25                 | 175 25 | 175 2  | 174 38 | 174 14 | 173 50 | 173 26 | 173 2  | 172 38 | 172 15 |     |
| 26                 | 176 20 | 175 57 | 175 33 | 175 9  | 174 45 | 174 21 | 173 57 | 173 33 | 173 10 |     |
| 27                 | 177 15 | 176 52 | 176 28 | 176 4  | 175 40 | 175 16 | 174 52 | 174 28 | 174 4  |     |
| 28                 | 178 10 | 177 47 | 177 23 | 176 59 | 176 35 | 176 11 | 175 47 | 175 23 | 174 59 |     |
| 29                 | 179 5  | 178 42 | 178 18 | 177 54 | 177 30 | 177 6  | 176 42 | 176 18 | 175 54 |     |
| 30                 | 180 0  | 179 37 | 179 13 | 178 49 | 178 25 | 178 1  | 177 37 | 177 13 | 176 48 |     |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| B                        | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    |
| 0                        | 183 12 | 182 47 | 182 23 | 181 59 | 181 35 | 181 11 | 180 47 | 180 23 | 180 0  |
| 1                        | 184 6  | 183 42 | 183 18 | 182 54 | 182 30 | 182 6  | 181 42 | 181 18 | 180 55 |
| 2                        | 185 1  | 184 37 | 184 13 | 183 49 | 183 25 | 183 1  | 182 37 | 182 13 | 181 50 |
| 3                        | 185 56 | 185 32 | 185 8  | 184 44 | 184 20 | 183 56 | 183 32 | 183 8  | 182 46 |
| 4                        | 186 50 | 186 27 | 186 3  | 185 39 | 185 15 | 184 51 | 184 27 | 184 3  | 183 40 |
| 5                        | 187 45 | 187 22 | 186 58 | 186 34 | 186 10 | 185 46 | 185 22 | 184 58 | 184 35 |
| 6                        | 188 40 | 188 18 | 187 53 | 187 30 | 187 6  | 186 42 | 186 18 | 185 54 | 185 30 |
| 7                        | 189 35 | 189 12 | 188 48 | 188 25 | 188 1  | 187 37 | 187 13 | 186 49 | 186 25 |
| 8                        | 190 30 | 190 7  | 189 43 | 189 20 | 188 56 | 188 32 | 188 8  | 187 44 | 187 20 |
| 9                        | 191 25 | 191 2  | 190 38 | 190 15 | 189 51 | 189 27 | 189 3  | 188 30 | 188 15 |
| 10                       | 192 19 | 191 57 | 191 33 | 191 10 | 190 46 | 190 22 | 189 58 | 189 34 | 189 11 |
| 11                       | 193 14 | 192 52 | 192 28 | 192 5  | 191 41 | 191 17 | 190 53 | 190 29 | 190 6  |
| 12                       | 194 9  | 193 47 | 193 23 | 193 0  | 192 36 | 192 13 | 191 48 | 191 25 | 191 1  |
| 13                       | 195 4  | 194 41 | 194 18 | 193 55 | 193 31 | 193 8  | 192 43 | 192 20 | 191 57 |
| 14                       | 195 59 | 195 36 | 195 13 | 194 50 | 194 26 | 194 3  | 193 39 | 93 16  | 192 52 |
| 15                       | 196 54 | 196 31 | 196 8  | 195 45 | 195 21 | 194 58 | 194 35 | 194 12 | 193 48 |
| 16                       | 197 49 | 197 26 | 197 3  | 196 40 | 196 16 | 195 53 | 195 30 | 195 7  | 194 43 |
| 17                       | 198 44 | 198 21 | 197 58 | 197 35 | 197 11 | 196 48 | 196 25 | 196 2  | 195 39 |
| 18                       | 199 39 | 199 16 | 198 53 | 198 30 | 198 7  | 197 44 | 197 21 | 196 58 | 196 35 |
| 19                       | 200 34 | 200 11 | 199 48 | 199 25 | 199 2  | 198 40 | 198 17 | 197 54 | 197 31 |
| 20                       | 201 29 | 201 9  | 200 43 | 200 21 | 199 58 | 199 36 | 199 13 | 198 50 | 198 27 |
| 21                       | 202 24 | 202 2  | 201 39 | 201 17 | 200 54 | 200 32 | 200 9  | 199 46 | 199 23 |
| 22                       | 203 19 | 202 57 | 202 34 | 202 12 | 201 50 | 201 28 | 201 5  | 200 42 | 200 19 |
| 23                       | 204 14 | 203 52 | 203 30 | 203 8  | 202 46 | 202 24 | 202 1  | 201 38 | 201 15 |
| 24                       | 205 10 | 204 48 | 204 26 | 204 4  | 203 42 | 203 20 | 202 57 | 202 35 | 202 12 |
| 25                       | 206 5  | 205 43 | 205 21 | 205 0  | 204 38 | 204 16 | 203 53 | 203 31 | 203 9  |
| 26                       | 207 0  | 206 39 | 206 17 | 205 56 | 205 34 | 205 12 | 204 50 | 204 28 | 204 6  |
| 27                       | 207 56 | 207 35 | 207 13 | 206 52 | 206 30 | 206 9  | 205 48 | 205 25 | 205 3  |
| 28                       | 208 51 | 208 30 | 208 9  | 207 48 | 207 26 | 207 5  | 206 43 | 206 22 | 206 0  |
| 29                       | 209 47 | 209 26 | 209 5  | 208 44 | 208 22 | 208 1  | 207 40 | 207 19 | 206 57 |
| 30                       | 210 43 | 210 22 | 210 1  | 209 40 | 209 19 | 208 58 | 208 37 | 208 16 | 207 54 |



# *Tabulae Mediationum*

## *Latitudo Meridiana*

|                 | 0                | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                |
|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <i>Latitudo</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> | <i>Meridiana</i> |
| 0               | 180 0            | 179 37           | 179 13           | 178 49           | 178 25           | 178 1            | 177 37           | 177 13           | 176 48           |
| 1               | 180 55           | 180 32           | 180 8            | 179 44           | 179 20           | 178 56           | 178 32           | 178 8            | 177 43           |
| 2               | 181 50           | 181 27           | 181 3            | 180 34           | 180 15           | 179 51           | 179 27           | 179 3            | 178 38           |
| 3               | 182 45           | 182 22           | 181 58           | 181 34           | 181 10           | 180 46           | 180 22           | 179 58           | 179 34           |
| 4               | 183 40           | 183 17           | 182 53           | 182 29           | 182 5            | 181 41           | 181 17           | 180 53           | 180 29           |
| 5               | 184 35           | 184 12           | 183 48           | 183 24           | 183 0            | 182 36           | 182 12           | 181 48           | 181 24           |
| 6               | 185 30           | 185 7            | 184 43           | 184 19           | 183 55           | 183 31           | 183 7            | 182 43           | 182 19           |
| 7               | 186 25           | 186 2            | 185 38           | 185 14           | 184 50           | 184 26           | 184 2            | 183 38           | 183 14           |
| 8               | 187 20           | 186 57           | 186 33           | 186 9            | 185 45           | 185 21           | 184 57           | 184 33           | 184 9            |
| 9               | 188 15           | 187 52           | 187 28           | 187 4            | 186 40           | 186 16           | 185 52           | 185 28           | 185 4            |
| 10              | 189 11           | 188 47           | 188 23           | 187 59           | 187 35           | 187 11           | 186 47           | 186 23           | 185 59           |
| 11              | 190 6            | 189 42           | 189 18           | 188 55           | 188 31           | 188 7            | 187 43           | 187 18           | 186 55           |
| 12              | 191 1            | 190 38           | 190 14           | 189 51           | 189 27           | 189 3            | 188 39           | 188 14           | 187 51           |
| 13              | 191 57           | 191 33           | 191 9            | 190 46           | 190 22           | 189 58           | 189 34           | 189 10           | 188 46           |
| 14              | 192 52           | 192 29           | 192 5            | 191 42           | 191 18           | 190 44           | 190 30           | 190 6            | 189 42           |
| 15              | 193 58           | 193 25           | 193 1            | 192 38           | 192 14           | 191 50           | 191 26           | 191 2            | 190 38           |
| 16              | 194 43           | 194 20           | 193 57           | 193 34           | 193 10           | 192 46           | 192 22           | 191 58           | 191 34           |
| 17              | 195 39           | 195 16           | 194 53           | 194 30           | 194 6            | 193 42           | 193 18           | 192 54           | 192 30           |
| 18              | 196 35           | 196 12           | 195 49           | 195 26           | 195 2            | 194 39           | 194 15           | 193 51           | 193 27           |
| 19              | 197 31           | 197 8            | 196 45           | 196 22           | 195 58           | 195 35           | 195 11           | 194 47           | 194 23           |
| 20              | 198 27           | 198 4            | 197 41           | 197 18           | 196 54           | 196 31           | 196 7            | 195 44           | 195 20           |
| 21              | 199 23           | 199 0            | 198 37           | 198 14           | 197 51           | 197 28           | 197 4            | 196 41           | 196 17           |
| 22              | 200 19           | 199 56           | 199 33           | 199 11           | 198 48           | 198 25           | 198 1            | 197 38           | 197 14           |
| 23              | 201 15           | 200 53           | 200 30           | 200 8            | 199 45           | 199 22           | 198 58           | 198 35           | 198 11           |
| 24              | 202 12           | 201 50           | 201 27           | 201 5            | 200 42           | 200 19           | 199 55           | 199 32           | 199 8            |
| 25              | 203 9            | 202 47           | 202 24           | 202 2            | 201 39           | 201 16           | 200 52           | 200 29           | 200 5            |
| 26              | 204 6            | 203 44           | 203 21           | 202 59           | 202 36           | 202 13           | 201 50           | 201 27           | 201 3            |
| 27              | 205 3            | 203 41           | 204 19           | 203 57           | 203 34           | 203 11           | 202 48           | 202 25           | 202 1            |
| 28              | 206 0            | 205 38           | 205 16           | 204 54           | 204 31           | 204 9            | 203 46           | 203 23           | 202 59           |
| 29              | 206 57           | 206 35           | 206 13           | 205 51           | 205 29           | 205 7            | 204 44           | 204 21           | 203 57           |
| 30              | 207 54           | 207 33           | 207 11           | 206 49           | 206 27           | 206 5            | 205 42           | 205 19           | 204 56           |



# Rechnum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |     |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| m                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |     |
| S                        | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m    | S m |
| 0                        | 210 43 | 210 22 | 210 1  | 209 40 | 209 19 | 208 58 | 208 37 | 208 16 | 207 54 |     |
| 1                        | 211 34 | 211 18 | 210 57 | 210 37 | 210 16 | 209 55 | 209 34 | 209 13 | 208 51 |     |
| 2                        | 212 39 | 212 14 | 211 54 | 211 34 | 211 13 | 210 52 | 210 31 | 210 10 | 209 49 |     |
| 3                        | 213 31 | 213 11 | 212 51 | 212 31 | 212 10 | 211 49 | 211 28 | 211 7  | 210 46 |     |
| 4                        | 214 27 | 214 7  | 213 47 | 213 27 | 213 7  | 212 46 | 212 25 | 212 5  | 211 44 |     |
| 5                        | 215 23 | 215 4  | 214 44 | 214 24 | 214 4  | 213 43 | 213 23 | 213 3  | 212 42 |     |
| 6                        | 216 20 | 216 1  | 215 41 | 215 21 | 215 1  | 214 41 | 214 21 | 214 1  | 213 40 |     |
| 7                        | 217 16 | 216 57 | 216 38 | 216 18 | 215 58 | 215 39 | 215 19 | 214 59 | 214 39 |     |
| 8                        | 218 13 | 217 54 | 217 35 | 217 15 | 216 56 | 216 37 | 216 17 | 215 57 | 215 37 |     |
| 9                        | 219 10 | 218 51 | 218 32 | 218 13 | 217 54 | 217 35 | 217 15 | 216 56 | 216 36 |     |
| 10                       | 220 7  | 219 48 | 219 29 | 219 11 | 218 52 | 218 33 | 218 13 | 217 54 | 217 35 |     |
| 11                       | 221 4  | 220 45 | 220 27 | 220 9  | 219 50 | 219 31 | 219 12 | 218 53 | 218 34 |     |
| 12                       | 222 1  | 221 43 | 221 25 | 221 7  | 220 48 | 220 30 | 220 11 | 219 52 | 219 33 |     |
| 13                       | 222 58 | 222 41 | 222 23 | 222 5  | 221 46 | 221 28 | 221 10 | 220 51 | 220 32 |     |
| 14                       | 223 56 | 223 39 | 223 21 | 223 3  | 222 45 | 222 27 | 222 9  | 221 50 | 221 31 |     |
| 15                       | 224 54 | 224 37 | 224 19 | 224 2  | 223 44 | 223 26 | 223 8  | 222 50 | 222 31 |     |
| 16                       | 225 51 | 225 35 | 225 17 | 225 0  | 224 43 | 224 25 | 224 7  | 223 49 | 223 31 |     |
| 17                       | 226 49 | 226 33 | 226 15 | 225 59 | 225 42 | 225 24 | 225 6  | 224 49 | 224 31 |     |
| 18                       | 227 47 | 227 31 | 227 14 | 226 58 | 226 41 | 226 23 | 226 6  | 225 49 | 225 31 |     |
| 19                       | 228 45 | 228 29 | 228 13 | 227 57 | 227 40 | 227 23 | 227 6  | 226 49 | 226 32 |     |
| 20                       | 229 43 | 229 28 | 229 12 | 228 56 | 228 39 | 228 23 | 228 6  | 227 49 | 227 33 |     |
| 21                       | 230 42 | 230 27 | 230 11 | 229 55 | 229 39 | 229 23 | 229 6  | 228 50 | 228 33 |     |
| 22                       | 231 40 | 231 25 | 231 10 | 230 54 | 230 38 | 230 23 | 230 6  | 229 50 | 229 34 |     |
| 23                       | 232 38 | 232 24 | 232 9  | 231 53 | 231 38 | 231 23 | 231 6  | 230 51 | 230 35 |     |
| 24                       | 233 37 | 233 23 | 233 8  | 232 53 | 232 38 | 232 23 | 232 7  | 231 52 | 231 36 |     |
| 25                       | 234 36 | 234 22 | 234 8  | 233 53 | 233 38 | 233 24 | 233 8  | 232 53 | 232 38 |     |
| 26                       | 235 35 | 235 21 | 235 7  | 234 53 | 234 38 | 234 24 | 234 9  | 233 55 | 233 40 |     |
| 27                       | 236 34 | 236 21 | 236 7  | 235 53 | 235 39 | 235 25 | 235 11 | 234 57 | 234 42 |     |
| 28                       | 237 33 | 237 20 | 237 7  | 236 54 | 236 40 | 236 26 | 236 12 | 235 58 | 235 44 |     |
| 29                       | 238 32 | 238 20 | 238 7  | 237 54 | 237 41 | 237 27 | 237 13 | 237 2  | 236 46 |     |
| 30                       | 239 32 | 239 20 | 239 7  | 238 55 | 238 42 | 238 29 | 238 15 | 238 4  | 237 48 |     |



# Cell Mediationum

## Latitudo Meridiana

|    | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| h  | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    |
| 0  | 207 54 | 207 33 | 207 11 | 206 49 | 206 27 | 206 5  | 205 42 | 205 19 | 204 56 |
| 1  | 208 51 | 208 30 | 208 8  | 207 47 | 207 25 | 207 3  | 206 40 | 206 17 | 205 54 |
| 2  | 209 49 | 209 27 | 209 6  | 208 45 | 208 23 | 208 1  | 207 38 | 207 16 | 206 53 |
| 3  | 210 46 | 210 25 | 210 4  | 209 43 | 209 21 | 208 59 | 208 37 | 208 15 | 207 51 |
| 4  | 211 44 | 211 23 | 211 2  | 210 41 | 210 19 | 209 58 | 209 36 | 209 14 | 208 50 |
| 5  | 212 42 | 212 21 | 212 0  | 211 39 | 211 18 | 210 57 | 210 35 | 210 13 | 209 50 |
| 6  | 213 40 | 213 20 | 212 59 | 212 38 | 212 17 | 211 56 | 211 34 | 211 12 | 210 50 |
| 7  | 214 39 | 214 18 | 213 58 | 213 37 | 213 16 | 212 55 | 212 33 | 212 12 | 211 50 |
| 8  | 215 37 | 215 17 | 214 57 | 214 36 | 214 15 | 213 54 | 213 33 | 213 12 | 212 50 |
| 9  | 216 36 | 216 16 | 215 56 | 215 36 | 215 15 | 214 54 | 214 33 | 214 12 | 213 51 |
| 10 | 217 35 | 217 15 | 216 55 | 216 35 | 216 15 | 215 54 | 215 33 | 215 12 | 214 51 |
| 11 | 218 34 | 218 14 | 217 54 | 217 35 | 217 15 | 216 54 | 216 33 | 216 13 | 215 52 |
| 12 | 219 33 | 219 14 | 218 54 | 218 35 | 218 15 | 217 55 | 217 34 | 217 14 | 216 53 |
| 13 | 220 32 | 220 13 | 219 54 | 219 35 | 219 15 | 218 56 | 218 35 | 218 15 | 217 54 |
| 14 | 221 31 | 221 13 | 220 54 | 220 35 | 220 16 | 219 57 | 219 36 | 219 16 | 218 56 |
| 15 | 222 31 | 222 13 | 221 54 | 221 36 | 221 17 | 220 58 | 220 38 | 220 18 | 219 58 |
| 16 | 223 31 | 223 13 | 222 54 | 222 36 | 222 18 | 221 59 | 221 39 | 221 19 | 221 0  |
| 17 | 224 31 | 224 13 | 223 55 | 223 37 | 223 19 | 223 0  | 222 40 | 222 21 | 222 2  |
| 18 | 225 31 | 225 14 | 224 56 | 224 38 | 224 20 | 224 1  | 223 42 | 223 23 | 223 4  |
| 19 | 226 32 | 226 14 | 225 57 | 225 39 | 225 21 | 225 3  | 224 44 | 224 25 | 224 7  |
| 20 | 227 33 | 227 15 | 226 58 | 226 40 | 226 23 | 226 5  | 225 46 | 225 28 | 225 10 |
| 21 | 228 33 | 228 16 | 227 59 | 227 42 | 227 25 | 227 7  | 226 49 | 226 31 | 226 13 |
| 22 | 229 34 | 229 17 | 229 0  | 228 44 | 228 27 | 228 9  | 227 52 | 227 34 | 227 16 |
| 23 | 230 35 | 230 18 | 230 2  | 229 46 | 229 29 | 229 12 | 228 55 | 228 37 | 228 20 |
| 24 | 231 36 | 231 20 | 231 4  | 230 48 | 230 32 | 230 15 | 229 58 | 229 41 | 229 24 |
| 25 | 232 38 | 232 22 | 232 6  | 231 51 | 231 35 | 231 18 | 231 2  | 230 45 | 230 28 |
| 26 | 233 40 | 233 24 | 233 9  | 232 54 | 232 38 | 232 22 | 232 6  | 231 49 | 231 33 |
| 27 | 234 42 | 234 27 | 234 12 | 233 57 | 233 42 | 233 26 | 233 10 | 232 50 | 232 38 |
| 28 | 235 44 | 235 29 | 235 15 | 235 0  | 234 45 | 234 30 | 234 14 | 233 58 | 233 43 |
| 29 | 236 46 | 236 32 | 236 18 | 236 3  | 235 49 | 235 34 | 235 18 | 235 3  | 234 48 |
| 30 | 237 45 | 237 35 | 237 21 | 237 7  | 236 53 | 236 38 | 236 23 | 236 8  | 235 53 |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| °                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| h                        | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0                        | 239 32 | 239 20 | 239 7  | 238 55 | 238 42 | 238 29 | 238 15 | 238 2  | 237 48 |
| 1                        | 240 32 | 240 20 | 240 7  | 239 55 | 239 43 | 239 30 | 239 17 | 239 4  | 238 51 |
| 2                        | 241 32 | 241 20 | 241 8  | 240 56 | 240 44 | 240 31 | 240 19 | 240 6  | 239 54 |
| 3                        | 242 32 | 242 21 | 242 9  | 241 57 | 241 45 | 241 33 | 241 21 | 241 9  | 240 57 |
| 4                        | 243 32 | 243 21 | 243 9  | 242 58 | 242 46 | 242 35 | 242 23 | 242 11 | 242 0  |
| 5                        | 244 32 | 244 21 | 244 10 | 243 59 | 243 48 | 243 37 | 243 25 | 243 14 | 243 3  |
| 6                        | 245 32 | 245 22 | 245 11 | 245 1  | 244 50 | 244 39 | 244 28 | 244 17 | 244 6  |
| 7                        | 246 32 | 246 22 | 246 12 | 246 2  | 245 52 | 245 41 | 245 31 | 245 20 | 245 9  |
| 8                        | 247 33 | 247 23 | 247 13 | 247 4  | 246 54 | 246 44 | 246 34 | 246 23 | 246 13 |
| 9                        | 248 33 | 248 24 | 248 15 | 248 6  | 247 56 | 247 47 | 247 37 | 247 27 | 247 17 |
| 10                       | 249 33 | 249 25 | 249 16 | 249 7  | 248 58 | 248 49 | 248 40 | 248 30 | 248 21 |
| 11                       | 250 34 | 250 26 | 250 17 | 250 9  | 250 0  | 249 52 | 249 43 | 249 34 | 249 25 |
| 12                       | 251 35 | 251 27 | 251 19 | 251 11 | 251 3  | 250 55 | 250 46 | 250 38 | 250 29 |
| 13                       | 252 36 | 252 28 | 252 21 | 252 13 | 252 5  | 251 58 | 251 49 | 251 42 | 251 33 |
| 14                       | 253 37 | 253 30 | 253 23 | 253 15 | 253 8  | 253 1  | 252 53 | 252 46 | 252 38 |
| 15                       | 254 38 | 254 32 | 254 25 | 254 18 | 254 11 | 254 4  | 253 57 | 253 50 | 253 43 |
| 16                       | 255 39 | 255 33 | 255 27 | 255 20 | 255 14 | 255 7  | 255 1  | 254 54 | 254 47 |
| 17                       | 256 40 | 256 35 | 256 29 | 256 23 | 256 17 | 256 11 | 256 5  | 255 58 | 255 52 |
| 18                       | 257 42 | 257 37 | 257 31 | 257 26 | 257 20 | 257 15 | 257 9  | 257 3  | 256 57 |
| 19                       | 258 43 | 258 38 | 258 33 | 258 28 | 258 23 | 258 18 | 258 13 | 258 7  | 258 2  |
| 20                       | 259 44 | 259 40 | 259 35 | 259 31 | 259 26 | 259 21 | 259 17 | 259 12 | 259 7  |
| 21                       | 260 46 | 260 42 | 260 38 | 260 34 | 260 29 | 260 25 | 260 21 | 260 17 | 260 12 |
| 22                       | 261 47 | 261 44 | 261 40 | 261 36 | 261 32 | 261 28 | 261 25 | 261 21 | 261 17 |
| 23                       | 262 48 | 262 46 | 262 42 | 262 39 | 262 35 | 262 32 | 262 29 | 262 25 | 262 22 |
| 24                       | 263 50 | 263 48 | 263 45 | 263 42 | 263 39 | 263 36 | 263 33 | 263 30 | 263 27 |
| 25                       | 264 51 | 264 50 | 264 47 | 264 45 | 264 42 | 264 40 | 264 37 | 264 35 | 264 33 |
| 26                       | 265 53 | 265 52 | 265 49 | 265 48 | 265 45 | 265 44 | 265 41 | 265 40 | 265 38 |
| 27                       | 266 55 | 266 54 | 266 52 | 266 51 | 266 49 | 266 48 | 266 46 | 266 45 | 266 43 |
| 28                       | 267 56 | 267 56 | 267 54 | 267 54 | 267 52 | 267 52 | 267 50 | 267 50 | 267 48 |
| 29                       | 268 58 | 268 58 | 268 57 | 268 57 | 268 56 | 268 56 | 268 55 | 268 55 | 268 54 |
| 30                       | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  |



# *Leli Mediationum*

| Latitudo Meridiana |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| °                  | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
| °                  | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
| 0                  | 237 48 | 237 35 | 237 21 | 237 7  | 236 53 | 236 37 | 236 23 | 236 8  | 235 53 |
| 1                  | 238 51 | 238 38 | 238 24 | 238 10 | 237 57 | 237 42 | 237 28 | 237 13 | 236 59 |
| 2                  | 239 54 | 239 41 | 239 27 | 239 14 | 239 1  | 238 47 | 238 33 | 238 19 | 238 5  |
| 3                  | 240 57 | 240 44 | 240 31 | 240 18 | 240 5  | 239 52 | 239 38 | 239 25 | 239 11 |
| 4                  | 242 0  | 241 47 | 241 34 | 241 22 | 241 10 | 240 57 | 240 44 | 240 31 | 240 17 |
| 5                  | 243 3  | 242 51 | 242 39 | 242 27 | 242 15 | 242 2  | 241 50 | 241 37 | 241 24 |
| 6                  | 244 6  | 243 55 | 243 43 | 243 32 | 243 20 | 243 8  | 242 56 | 242 44 | 242 31 |
| 7                  | 245 9  | 244 59 | 244 47 | 244 37 | 244 25 | 244 13 | 244 2  | 243 50 | 243 38 |
| 8                  | 246 13 | 246 3  | 245 52 | 245 42 | 245 30 | 245 19 | 245 8  | 244 56 | 244 45 |
| 9                  | 247 17 | 247 7  | 246 57 | 246 47 | 246 36 | 246 25 | 246 14 | 246 3  | 245 52 |
| 10                 | 248 21 | 248 11 | 248 2  | 247 52 | 247 42 | 247 31 | 247 21 | 247 10 | 247 0  |
| 11                 | 249 25 | 249 16 | 249 7  | 248 57 | 248 48 | 248 38 | 248 28 | 248 18 | 248 8  |
| 12                 | 250 29 | 250 21 | 250 12 | 250 3  | 249 54 | 249 45 | 249 35 | 249 26 | 249 16 |
| 13                 | 251 33 | 251 26 | 251 17 | 251 9  | 251 0  | 250 51 | 250 42 | 250 33 | 250 24 |
| 14                 | 252 38 | 252 31 | 252 22 | 252 15 | 252 6  | 251 58 | 251 49 | 251 41 | 251 32 |
| 15                 | 253 43 | 253 36 | 253 28 | 253 21 | 253 13 | 253 5  | 252 57 | 252 49 | 252 41 |
| 16                 | 254 47 | 254 41 | 254 33 | 254 27 | 254 19 | 254 12 | 254 4  | 253 57 | 253 49 |
| 17                 | 255 52 | 255 46 | 255 39 | 255 33 | 255 26 | 255 19 | 255 12 | 255 5  | 254 58 |
| 18                 | 256 57 | 256 51 | 256 45 | 256 39 | 256 33 | 256 27 | 256 20 | 256 14 | 256 7  |
| 19                 | 258 2  | 257 56 | 257 51 | 257 45 | 257 40 | 257 34 | 257 28 | 257 22 | 257 16 |
| 20                 | 259 7  | 259 2  | 258 57 | 258 52 | 258 47 | 258 41 | 258 36 | 258 30 | 258 25 |
| 21                 | 260 12 | 260 8  | 260 3  | 259 59 | 259 54 | 259 49 | 259 44 | 259 39 | 259 34 |
| 22                 | 261 17 | 261 13 | 261 9  | 261 5  | 261 1  | 260 56 | 260 52 | 260 48 | 260 43 |
| 23                 | 262 22 | 262 18 | 262 15 | 262 11 | 262 8  | 262 4  | 262 0  | 261 57 | 261 52 |
| 24                 | 263 27 | 263 24 | 263 21 | 263 18 | 263 15 | 263 12 | 263 9  | 263 6  | 263 2  |
| 25                 | 264 33 | 264 30 | 264 27 | 264 25 | 264 22 | 264 20 | 264 17 | 264 15 | 264 11 |
| 26                 | 265 38 | 265 36 | 265 33 | 265 32 | 265 29 | 265 28 | 265 25 | 265 24 | 265 21 |
| 27                 | 266 43 | 266 42 | 266 40 | 266 39 | 266 37 | 266 36 | 266 34 | 266 33 | 266 31 |
| 28                 | 267 48 | 267 48 | 267 46 | 267 46 | 267 44 | 267 44 | 267 42 | 267 42 | 267 40 |
| 29                 | 268 54 | 268 54 | 268 53 | 268 53 | 268 52 | 268 52 | 268 51 | 268 51 | 268 50 |
| 30                 | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  |

DLI



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| h                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| h                        | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0                        | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  | 270 0  |
| 1                        | 271 2  | 271 2  | 271 3  | 271 3  | 271 4  | 271 4  | 271 5  | 271 5  | 271 6  |
| 2                        | 272 4  | 272 4  | 272 6  | 272 6  | 272 8  | 272 8  | 272 10 | 272 10 | 272 12 |
| 3                        | 273 5  | 273 6  | 273 8  | 273 9  | 273 11 | 273 12 | 273 14 | 273 15 | 273 17 |
| 4                        | 274 7  | 274 8  | 274 11 | 274 12 | 274 15 | 274 16 | 274 19 | 274 20 | 274 22 |
| 5                        | 275 9  | 275 10 | 275 13 | 275 15 | 275 18 | 275 20 | 275 23 | 275 25 | 275 27 |
| 6                        | 276 10 | 276 12 | 276 15 | 276 18 | 276 21 | 276 24 | 276 27 | 276 30 | 276 33 |
| 7                        | 277 12 | 277 14 | 277 18 | 277 21 | 277 25 | 277 28 | 277 31 | 277 35 | 277 38 |
| 8                        | 278 13 | 278 16 | 278 20 | 278 24 | 278 28 | 278 32 | 278 35 | 278 39 | 278 43 |
| 9                        | 279 14 | 279 18 | 279 22 | 279 26 | 279 31 | 279 35 | 279 39 | 279 43 | 279 48 |
| 10                       | 280 16 | 280 20 | 280 25 | 280 29 | 280 34 | 280 39 | 280 43 | 280 48 | 280 53 |
| 11                       | 281 17 | 281 22 | 281 27 | 281 32 | 281 37 | 281 42 | 281 47 | 281 53 | 281 58 |
| 12                       | 282 18 | 282 23 | 282 29 | 282 34 | 282 40 | 282 45 | 282 51 | 282 57 | 283 3  |
| 13                       | 283 20 | 283 25 | 283 31 | 283 37 | 283 43 | 283 49 | 283 55 | 284 2  | 284 8  |
| 14                       | 284 21 | 284 27 | 284 33 | 284 40 | 284 46 | 284 53 | 284 59 | 285 6  | 285 13 |
| 15                       | 285 22 | 285 28 | 285 35 | 285 42 | 285 49 | 285 56 | 286 3  | 286 10 | 286 17 |
| 16                       | 286 23 | 286 30 | 286 37 | 286 45 | 286 52 | 286 59 | 287 7  | 287 14 | 287 22 |
| 17                       | 287 24 | 287 32 | 287 39 | 287 47 | 287 55 | 288 2  | 288 11 | 288 18 | 288 27 |
| 18                       | 288 25 | 288 33 | 288 41 | 288 49 | 288 57 | 289 5  | 289 14 | 289 22 | 289 31 |
| 19                       | 289 26 | 289 34 | 289 43 | 289 51 | 290 0  | 290 8  | 290 17 | 290 26 | 290 35 |
| 20                       | 290 27 | 290 35 | 290 44 | 290 53 | 291 2  | 291 11 | 291 20 | 291 30 | 291 39 |
| 21                       | 291 27 | 291 36 | 291 45 | 291 55 | 292 4  | 292 13 | 292 23 | 292 33 | 292 43 |
| 22                       | 292 27 | 292 37 | 292 47 | 292 56 | 293 6  | 293 16 | 293 26 | 293 37 | 293 47 |
| 23                       | 293 28 | 293 38 | 293 48 | 293 58 | 294 8  | 294 19 | 294 29 | 294 40 | 294 51 |
| 24                       | 294 28 | 294 38 | 294 49 | 294 59 | 295 10 | 295 21 | 295 32 | 295 43 | 295 54 |
| 25                       | 295 28 | 295 39 | 295 50 | 296 1  | 296 12 | 296 23 | 296 35 | 296 46 | 296 57 |
| 26                       | 296 28 | 296 39 | 296 51 | 297 2  | 297 14 | 297 25 | 297 37 | 297 49 | 298 0  |
| 27                       | 297 28 | 297 39 | 297 51 | 298 3  | 298 15 | 298 27 | 298 39 | 298 51 | 299 3  |
| 28                       | 298 28 | 298 40 | 298 52 | 299 4  | 299 16 | 299 29 | 299 42 | 299 54 | 300 6  |
| 29                       | 299 28 | 299 40 | 299 53 | 300 5  | 300 17 | 300 30 | 300 43 | 300 56 | 301 9  |
| 30                       | 300 28 | 300 40 | 300 53 | 301 5  | 301 18 | 301 31 | 301 45 | 301 58 | 302 12 |



# *Soli Mediationum*

|    |     | Latitudo Meridiana |     |     |     |     |     |     |     |     |     |
|----|-----|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| h  | o   | 1                  | 2   | 3   | 4   | 5   | 6   | 7   | 8   |     |     |
|    |     | S m                | S m | S m | S m | S m | S m | S m | S m | S m | S m |
| 0  | 270 | 0                  | 270 | 0   | 270 | 0   | 270 | 0   | 270 | 0   | 270 |
| 1  | 271 | 6                  | 271 | 6   | 271 | 7   | 271 | 7   | 271 | 8   | 271 |
| 2  | 272 | 12                 | 272 | 12  | 272 | 14  | 272 | 14  | 272 | 16  | 272 |
| 3  | 273 | 17                 | 273 | 19  | 273 | 20  | 273 | 21  | 273 | 23  | 273 |
| 4  | 274 | 22                 | 274 | 24  | 274 | 27  | 274 | 28  | 274 | 31  | 274 |
| 5  | 275 | 27                 | 275 | 30  | 275 | 33  | 275 | 35  | 275 | 38  | 275 |
| 6  | 276 | 33                 | 276 | 36  | 276 | 39  | 276 | 42  | 276 | 45  | 276 |
| 7  | 277 | 38                 | 277 | 42  | 277 | 45  | 277 | 49  | 277 | 52  | 277 |
| 8  | 278 | 43                 | 278 | 47  | 278 | 51  | 278 | 55  | 278 | 59  | 279 |
| 9  | 279 | 48                 | 279 | 52  | 279 | 57  | 280 | 1   | 280 | 6   | 280 |
| 10 | 280 | 53                 | 280 | 58  | 281 | 3   | 281 | 8   | 281 | 13  | 281 |
| 11 | 281 | 58                 | 282 | 4   | 282 | 9   | 282 | 15  | 282 | 20  | 282 |
| 12 | 283 | 3                  | 283 | 9   | 283 | 15  | 283 | 22  | 283 | 27  | 283 |
| 13 | 284 | 8                  | 284 | 14  | 284 | 21  | 284 | 27  | 284 | 34  | 284 |
| 14 | 285 | 13                 | 285 | 19  | 285 | 27  | 285 | 33  | 285 | 41  | 285 |
| 15 | 286 | 17                 | 286 | 24  | 286 | 32  | 286 | 30  | 286 | 47  | 286 |
| 16 | 287 | 22                 | 287 | 29  | 287 | 38  | 287 | 45  | 287 | 57  | 288 |
| 17 | 288 | 27                 | 288 | 34  | 288 | 43  | 288 | 51  | 289 | 0   | 289 |
| 18 | 289 | 31                 | 289 | 39  | 289 | 48  | 289 | 57  | 290 | 6   | 290 |
| 19 | 290 | 35                 | 290 | 44  | 290 | 53  | 291 | 3   | 291 | 12  | 291 |
| 20 | 291 | 39                 | 291 | 49  | 291 | 58  | 292 | 8   | 292 | 18  | 292 |
| 21 | 292 | 43                 | 292 | 53  | 293 | 3   | 293 | 13  | 293 | 24  | 293 |
| 22 | 293 | 47                 | 293 | 57  | 294 | 8   | 294 | 18  | 294 | 30  | 294 |
| 23 | 294 | 51                 | 295 | 1   | 295 | 13  | 295 | 23  | 295 | 35  | 295 |
| 24 | 295 | 54                 | 296 | 5   | 296 | 17  | 296 | 28  | 296 | 40  | 296 |
| 25 | 296 | 57                 | 297 | 9   | 297 | 21  | 297 | 33  | 297 | 45  | 297 |
| 26 | 298 | 0                  | 298 | 13  | 298 | 25  | 298 | 38  | 298 | 50  | 299 |
| 27 | 299 | 3                  | 299 | 16  | 299 | 29  | 299 | 42  | 299 | 55  | 300 |
| 28 | 300 | 6                  | 300 | 19  | 300 | 33  | 300 | 46  | 300 | 59  | 301 |
| 29 | 301 | 9                  | 301 | 22  | 301 | 36  | 301 | 50  | 302 | 3   | 302 |
| 30 | 302 | 12                 | 302 | 25  | 302 | 39  | 302 | 53  | 303 | 7   | 303 |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 8                        | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |        |
| B m                      | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    |
| 0                        | 300 28 | 300 40 | 300 53 | 301 5  | 301 18 | 301 31 | 301 45 | 301 58 | 302 12 |
| 1                        | 301 28 | 301 40 | 301 53 | 302 6  | 302 19 | 302 33 | 302 47 | 303 0  | 303 14 |
| 2                        | 302 27 | 302 40 | 302 53 | 303 6  | 303 20 | 303 34 | 303 48 | 304 2  | 304 16 |
| 3                        | 303 26 | 303 39 | 303 53 | 304 7  | 304 21 | 304 35 | 304 49 | 305 3  | 305 18 |
| 4                        | 304 25 | 304 39 | 304 53 | 305 7  | 305 22 | 305 36 | 305 51 | 306 5  | 306 20 |
| 5                        | 305 24 | 305 38 | 305 52 | 306 7  | 306 22 | 306 36 | 306 52 | 307 7  | 307 22 |
| 6                        | 306 23 | 306 37 | 306 52 | 307 7  | 307 22 | 307 37 | 307 53 | 308 8  | 308 24 |
| 7                        | 307 22 | 307 36 | 307 51 | 308 7  | 308 22 | 308 37 | 308 54 | 309 9  | 309 25 |
| 8                        | 308 20 | 308 35 | 308 50 | 309 6  | 309 22 | 309 37 | 309 54 | 310 10 | 310 26 |
| 9                        | 309 18 | 309 33 | 309 49 | 310 5  | 310 21 | 310 37 | 310 54 | 311 10 | 311 27 |
| 10                       | 310 17 | 310 32 | 310 48 | 311 4  | 311 21 | 311 37 | 311 54 | 312 11 | 312 27 |
| 11                       | 311 15 | 311 31 | 311 47 | 312 3  | 312 20 | 312 37 | 312 54 | 313 11 | 313 28 |
| 12                       | 312 13 | 312 29 | 312 46 | 313 2  | 313 19 | 313 37 | 313 54 | 314 11 | 314 29 |
| 13                       | 313 11 | 313 27 | 313 45 | 314 1  | 314 18 | 314 36 | 314 54 | 315 11 | 315 29 |
| 14                       | 314 9  | 314 25 | 314 43 | 315 0  | 315 17 | 315 35 | 315 53 | 316 11 | 316 29 |
| 15                       | 315 6  | 315 23 | 315 41 | 315 58 | 316 16 | 316 34 | 316 52 | 317 10 | 317 29 |
| 16                       | 316 4  | 316 21 | 316 39 | 316 57 | 317 15 | 317 33 | 317 51 | 318 10 | 318 29 |
| 17                       | 317 2  | 317 19 | 317 37 | 317 55 | 318 14 | 318 32 | 318 50 | 319 9  | 319 28 |
| 18                       | 317 59 | 318 17 | 318 35 | 318 53 | 319 12 | 319 30 | 319 49 | 320 8  | 320 27 |
| 19                       | 318 56 | 319 15 | 319 33 | 319 51 | 320 10 | 320 29 | 320 48 | 321 7  | 321 26 |
| 20                       | 319 53 | 320 12 | 320 31 | 320 49 | 321 8  | 321 27 | 321 47 | 322 6  | 322 25 |
| 21                       | 320 50 | 321 9  | 321 28 | 321 47 | 322 6  | 322 25 | 322 45 | 323 4  | 323 24 |
| 22                       | 321 47 | 322 6  | 322 25 | 322 45 | 323 4  | 323 23 | 323 43 | 324 3  | 324 23 |
| 23                       | 322 44 | 323 3  | 323 22 | 323 42 | 324 2  | 324 21 | 324 41 | 325 1  | 325 21 |
| 24                       | 323 40 | 323 59 | 324 19 | 324 39 | 324 59 | 325 19 | 325 39 | 325 59 | 326 20 |
| 25                       | 324 37 | 324 56 | 325 16 | 325 36 | 325 56 | 326 17 | 326 37 | 326 57 | 327 18 |
| 26                       | 325 33 | 325 53 | 326 13 | 326 33 | 326 53 | 327 14 | 327 35 | 327 55 | 328 16 |
| 27                       | 326 29 | 326 49 | 327 9  | 327 29 | 327 50 | 328 11 | 328 32 | 328 53 | 329 14 |
| 28                       | 327 25 | 327 46 | 328 6  | 328 26 | 328 47 | 329 8  | 329 29 | 329 50 | 330 11 |
| 29                       | 328 21 | 328 42 | 329 3  | 329 23 | 329 44 | 330 5  | 330 26 | 330 47 | 331 9  |
| 30                       | 329 17 | 329 38 | 329 59 | 330 20 | 330 41 | 331 2  | 331 23 | 331 44 | 332 6  |



# *Tablæ Mediarum*

| Latitudo Meridiana |        |        |        |        |        |        |        |        |        |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                    | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
| 5                  | 5 m    | 5 m    | 5 m    | 5 m    | 5 m    | 5 m    | 5 m    | 5 m    | 5 m    |
| 0                  | 302 12 | 302 25 | 302 39 | 302 53 | 303 7  | 303 22 | 303 37 | 303 52 | 304 7  |
| 1                  | 303 14 | 303 28 | 303 42 | 303 57 | 304 11 | 304 26 | 304 42 | 304 57 | 305 12 |
| 2                  | 304 16 | 304 31 | 304 45 | 305 0  | 305 15 | 305 30 | 305 46 | 306 2  | 306 17 |
| 3                  | 305 18 | 305 33 | 305 48 | 306 3  | 306 18 | 306 34 | 306 50 | 307 6  | 307 22 |
| 4                  | 306 20 | 306 36 | 306 51 | 307 6  | 307 22 | 307 38 | 307 54 | 308 11 | 308 27 |
| 5                  | 307 22 | 307 38 | 307 54 | 308 9  | 308 25 | 308 42 | 308 58 | 309 15 | 309 32 |
| 6                  | 308 24 | 308 40 | 308 56 | 309 12 | 309 28 | 309 45 | 310 2  | 310 19 | 310 36 |
| 7                  | 309 25 | 309 42 | 309 58 | 310 14 | 310 31 | 310 48 | 311 5  | 311 23 | 311 40 |
| 8                  | 310 26 | 310 43 | 311 0  | 311 16 | 311 33 | 311 51 | 312 8  | 312 26 | 312 44 |
| 9                  | 311 27 | 311 44 | 312 1  | 312 18 | 312 35 | 312 53 | 313 11 | 313 29 | 313 47 |
| 10                 | 312 27 | 312 45 | 313 2  | 313 20 | 313 37 | 313 55 | 314 14 | 314 32 | 314 50 |
| 11                 | 313 28 | 313 46 | 314 3  | 314 21 | 314 39 | 314 57 | 315 16 | 315 35 | 315 53 |
| 12                 | 314 29 | 314 46 | 315 4  | 315 22 | 315 40 | 315 59 | 316 18 | 316 37 | 316 56 |
| 13                 | 315 29 | 315 47 | 316 5  | 316 23 | 316 41 | 317 0  | 317 20 | 317 39 | 317 58 |
| 14                 | 316 29 | 316 47 | 317 6  | 317 24 | 317 42 | 318 1  | 318 21 | 318 41 | 319 0  |
| 15                 | 317 29 | 317 47 | 318 6  | 318 24 | 318 43 | 319 2  | 319 22 | 319 42 | 320 2  |
| 16                 | 318 29 | 318 47 | 319 6  | 319 25 | 319 44 | 320 3  | 320 24 | 320 44 | 321 4  |
| 17                 | 319 28 | 319 47 | 320 6  | 320 25 | 320 45 | 321 4  | 321 25 | 321 45 | 322 6  |
| 18                 | 320 27 | 320 46 | 321 6  | 321 25 | 321 45 | 322 5  | 322 26 | 322 46 | 323 7  |
| 19                 | 321 26 | 321 46 | 322 6  | 322 25 | 322 45 | 323 6  | 323 27 | 323 47 | 324 8  |
| 20                 | 322 25 | 322 45 | 323 5  | 323 25 | 323 45 | 324 6  | 324 27 | 324 48 | 325 9  |
| 21                 | 323 24 | 323 44 | 324 4  | 324 24 | 324 45 | 325 6  | 325 27 | 325 48 | 326 9  |
| 22                 | 324 23 | 324 43 | 325 3  | 325 24 | 325 45 | 326 6  | 326 27 | 326 48 | 327 10 |
| 23                 | 325 21 | 325 42 | 326 2  | 326 23 | 326 44 | 327 5  | 327 27 | 327 48 | 328 10 |
| 24                 | 326 20 | 326 40 | 327 1  | 327 22 | 327 43 | 328 4  | 328 26 | 328 48 | 329 10 |
| 25                 | 327 18 | 327 39 | 328 0  | 328 21 | 328 42 | 329 3  | 329 25 | 329 47 | 330 10 |
| 26                 | 328 16 | 328 37 | 328 58 | 329 19 | 329 41 | 330 2  | 330 24 | 330 46 | 331 9  |
| 27                 | 329 14 | 329 35 | 329 56 | 330 17 | 330 39 | 331 1  | 331 23 | 331 45 | 332 8  |
| 28                 | 330 11 | 330 33 | 330 54 | 331 15 | 331 37 | 331 59 | 332 22 | 332 44 | 333 7  |
| 29                 | 331 9  | 331 30 | 331 52 | 332 13 | 332 35 | 332 57 | 333 20 | 333 43 | 334 6  |
| 30                 | 332 6  | 332 27 | 332 49 | 333 11 | 333 33 | 333 55 | 334 18 | 334 41 | 335 4  |



# Residuum Tabule

| Latitudo Septentrionalis |        |        |        |        |        |        |        |        |        |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| X                        | 8      | 7      | 6      | 5      | 4      | 3      | 2      | 1      | 0      |
| B                        | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    |
| 0                        | 329 17 | 329 38 | 329 59 | 330 20 | 330 41 | 331 2  | 331 23 | 331 44 | 332 6  |
| 1                        | 330 13 | 330 34 | 330 55 | 331 16 | 331 38 | 331 59 | 332 20 | 332 41 | 333 3  |
| 2                        | 331 9  | 331 30 | 331 51 | 332 12 | 332 34 | 332 55 | 333 17 | 333 38 | 334 0  |
| 3                        | 332 4  | 332 25 | 332 47 | 333 8  | 333 30 | 333 51 | 334 12 | 334 35 | 334 57 |
| 4                        | 333 0  | 333 21 | 333 43 | 334 4  | 334 26 | 334 48 | 335 10 | 335 32 | 335 54 |
| 5                        | 333 55 | 334 17 | 334 39 | 335 0  | 335 22 | 335 44 | 336 7  | 336 29 | 336 51 |
| 6                        | 334 50 | 335 12 | 335 34 | 335 56 | 336 18 | 336 40 | 337 3  | 337 25 | 337 48 |
| 7                        | 335 46 | 336 8  | 336 30 | 336 52 | 337 14 | 337 36 | 337 59 | 338 22 | 338 45 |
| 8                        | 336 41 | 337 3  | 337 26 | 337 48 | 338 10 | 338 32 | 338 55 | 339 18 | 339 41 |
| 9                        | 337 36 | 337 58 | 338 21 | 338 43 | 339 6  | 339 28 | 339 51 | 340 14 | 340 37 |
| 10                       | 338 31 | 338 54 | 339 17 | 339 39 | 340 2  | 340 24 | 340 47 | 341 10 | 341 33 |
| 11                       | 339 26 | 339 49 | 340 12 | 340 35 | 340 58 | 341 20 | 341 43 | 342 6  | 342 29 |
| 12                       | 340 21 | 340 44 | 341 7  | 341 30 | 341 52 | 342 16 | 342 39 | 343 2  | 343 25 |
| 13                       | 341 16 | 341 39 | 342 2  | 342 25 | 342 49 | 343 12 | 343 35 | 343 58 | 344 21 |
| 14                       | 342 11 | 342 34 | 342 57 | 343 20 | 343 44 | 344 7  | 344 30 | 344 53 | 345 17 |
| 15                       | 343 6  | 341 29 | 343 52 | 344 15 | 344 39 | 345 2  | 345 25 | 345 48 | 346 12 |
| 16                       | 344 1  | 344 24 | 344 47 | 345 10 | 345 34 | 345 57 | 346 21 | 346 44 | 347 8  |
| 17                       | 344 56 | 344 19 | 345 42 | 346 5  | 346 29 | 346 52 | 347 17 | 347 40 | 348 3  |
| 18                       | 345 41 | 346 13 | 346 37 | 347 0  | 347 24 | 347 47 | 348 12 | 348 35 | 348 59 |
| 19                       | 346 46 | 347 8  | 347 32 | 347 55 | 348 19 | 348 43 | 349 7  | 349 31 | 349 54 |
| 20                       | 347 41 | 348 3  | 348 27 | 348 50 | 349 14 | 349 38 | 350 2  | 350 26 | 350 49 |
| 21                       | 348 35 | 348 58 | 349 22 | 349 45 | 350 9  | 350 33 | 350 57 | 351 21 | 351 45 |
| 22                       | 349 30 | 349 53 | 350 17 | 350 40 | 351 4  | 351 28 | 351 52 | 352 16 | 352 40 |
| 23                       | 350 25 | 350 48 | 351 12 | 351 35 | 351 59 | 352 23 | 352 47 | 353 11 | 353 35 |
| 24                       | 351 20 | 351 43 | 352 7  | 352 30 | 352 54 | 353 18 | 353 42 | 354 6  | 354 30 |
| 25                       | 352 15 | 352 38 | 353 2  | 353 26 | 353 50 | 354 14 | 354 38 | 355 2  | 355 25 |
| 26                       | 353 10 | 353 33 | 353 57 | 354 21 | 354 45 | 355 9  | 355 33 | 355 57 | 356 20 |
| 27                       | 354 4  | 354 28 | 354 52 | 355 16 | 355 40 | 356 4  | 356 28 | 356 52 | 357 15 |
| 28                       | 354 59 | 355 23 | 355 47 | 356 11 | 356 35 | 356 59 | 357 23 | 357 47 | 358 10 |
| 29                       | 355 54 | 356 18 | 356 42 | 357 6  | 357 30 | 357 54 | 358 18 | 358 42 | 359 5  |
| 30                       | 356 48 | 357 13 | 357 37 | 358 1  | 358 25 | 358 49 | 359 13 | 359 37 | 360 0  |



# *Reli Mediationum*

| Latitudo Meridiana |        |        |        |        |        |        |        |        |        |     |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| X                  | 0      | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |     |
| D                  | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m    | B m |
| 0                  | 332 6  | 332 27 | 332 49 | 333 11 | 333 33 | 333 55 | 334 18 | 334 41 | 335 4  |     |
| 1                  | 333 3  | 333 25 | 333 47 | 334 9  | 334 31 | 334 53 | 335 16 | 335 39 | 336 3  |     |
| 2                  | 334 0  | 334 22 | 334 44 | 335 6  | 335 29 | 335 51 | 336 14 | 336 37 | 337 1  |     |
| 3                  | 334 57 | 335 19 | 335 41 | 336 3  | 336 26 | 336 49 | 337 12 | 337 35 | 337 59 |     |
| 4                  | 335 54 | 336 16 | 336 39 | 337 1  | 337 24 | 337 47 | 338 10 | 338 33 | 338 57 |     |
| 5                  | 336 51 | 337 13 | 337 36 | 337 58 | 338 21 | 338 44 | 339 8  | 339 31 | 339 55 |     |
| 6                  | 337 48 | 338 10 | 338 33 | 338 55 | 339 18 | 339 41 | 340 5  | 340 28 | 340 52 |     |
| 7                  | 338 45 | 339 7  | 339 30 | 339 52 | 340 15 | 340 38 | 341 2  | 341 25 | 341 49 |     |
| 8                  | 339 41 | 340 4  | 340 27 | 340 49 | 341 12 | 341 35 | 341 59 | 342 22 | 342 46 |     |
| 9                  | 340 37 | 341 0  | 341 23 | 341 46 | 342 9  | 342 32 | 342 56 | 343 19 | 343 43 |     |
| 10                 | 341 33 | 341 56 | 342 19 | 342 42 | 343 6  | 343 29 | 343 53 | 344 16 | 344 40 |     |
| 11                 | 342 29 | 342 52 | 343 15 | 343 38 | 344 2  | 344 25 | 344 49 | 345 13 | 345 37 |     |
| 12                 | 343 25 | 343 48 | 344 11 | 344 34 | 344 58 | 345 21 | 345 45 | 346 9  | 346 33 |     |
| 13                 | 344 21 | 344 42 | 345 7  | 345 30 | 345 54 | 346 18 | 346 42 | 347 6  | 347 30 |     |
| 14                 | 345 17 | 345 40 | 346 3  | 346 26 | 346 50 | 347 14 | 347 38 | 348 2  | 348 26 |     |
| 15                 | 346 12 | 346 35 | 346 59 | 347 22 | 348 46 | 348 10 | 348 34 | 348 58 | 349 22 |     |
| 16                 | 347 8  | 347 31 | 347 55 | 348 18 | 348 42 | 349 6  | 349 30 | 349 54 | 350 18 |     |
| 17                 | 348 3  | 348 27 | 348 51 | 349 14 | 349 38 | 350 2  | 350 26 | 350 50 | 351 14 |     |
| 18                 | 348 59 | 349 22 | 349 46 | 350 9  | 350 33 | 350 57 | 351 21 | 351 45 | 352 9  |     |
| 19                 | 349 54 | 350 18 | 350 42 | 351 5  | 351 29 | 351 53 | 352 17 | 352 41 | 353 5  |     |
| 20                 | 350 49 | 351 13 | 351 37 | 352 1  | 352 25 | 352 49 | 353 13 | 353 37 | 354 1  |     |
| 21                 | 351 45 | 352 8  | 352 32 | 352 56 | 353 20 | 353 44 | 354 8  | 354 32 | 354 56 |     |
| 22                 | 352 40 | 353 3  | 352 27 | 353 51 | 354 15 | 354 39 | 355 3  | 355 27 | 355 51 |     |
| 23                 | 353 35 | 353 58 | 354 22 | 354 46 | 355 10 | 355 34 | 355 58 | 356 22 | 356 46 |     |
| 24                 | 354 30 | 354 53 | 355 17 | 355 41 | 356 5  | 356 29 | 356 53 | 357 17 | 357 41 |     |
| 25                 | 355 25 | 355 48 | 356 12 | 356 36 | 357 0  | 357 24 | 357 48 | 358 12 | 358 36 |     |
| 26                 | 356 20 | 356 43 | 357 7  | 357 31 | 357 55 | 358 19 | 358 43 | 359 7  | 359 31 |     |
| 27                 | 357 15 | 357 38 | 358 2  | 358 26 | 358 49 | 359 14 | 359 38 | 0 2    | 0 26   |     |
| 28                 | 358 10 | 358 33 | 358 57 | 359 21 | 359 45 | 0 9    | 0 33   | 0 57   | 1 22   |     |
| 29                 | 359 5  | 359 28 | 359 52 | 0 16   | 0 40   | 1 4    | 1 28   | 1 52   | 2 17   |     |
| 30                 | 360 0  | 0 23   | 0 47   | 1 11   | 1 35   | 1 59   | 2 23   | 2 47   | 3 12   |     |

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# Tabula Generatis

| V       |       |                      |  | S       |      |                      |  | II      |      |                      |  |
|---------|-------|----------------------|--|---------|------|----------------------|--|---------|------|----------------------|--|
| Radix   |       | Numer <sup>o</sup>   |  | Radix   |      | Numer <sup>o</sup>   |  | Radix   |      | Numer <sup>o</sup>   |  |
| ascēſio |       | multipl <sup>o</sup> |  | ascēſio |      | multipl <sup>o</sup> |  | ascēſio |      | multipl <sup>o</sup> |  |
| num     |       | cand <sup>o</sup>    |  | num     |      | cand <sup>o</sup>    |  | num     |      | cand <sup>o</sup>    |  |
| S       | S in  |                      |  | S       | S in |                      |  | S       | S in |                      |  |
| 0       | 0 0   | 2 6089               |  | 33      | 11   | 22077                |  | 62      | 6    | 12209                |  |
| 1       | 1 6   | 26084                |  | 33      | 14   | 21822                |  | 63      | 3    | 11823                |  |
| 2       | 2 11  | 26069                |  | 34      | 16   | 21560                |  | 64      | 0    | 11434                |  |
| 3       | 3 16  | 26046                |  | 35      | 18   | 21292                |  | 64      | 57   | 11044                |  |
| 4       | 4 22  | 26013                |  | 36      | 20   | 21017                |  | 65      | 54   | 10652                |  |
| 5       | 5 27  | 25971                |  | 37      | 22   | 20734                |  | 66      | 51   | 10258                |  |
| 6       | 6 32  | 25919                |  | 38      | 23   | 20447                |  | 67      | 47   | 9863                 |  |
| 7       | 7 38  | 25857                |  | 39      | 25   | 20155                |  | 68      | 44   | 9465                 |  |
| 8       | 8 43  | 25787                |  | 40      | 26   | 19858                |  | 69      | 40   | 9065                 |  |
| 9       | 9 48  | 25708                |  | 41      | 27   | 19554                |  | 70      | 36   | 8664                 |  |
| 10      | 10 52 | 25619                |  | 42      | 28   | 19245                |  | 71      | 33   | 8260                 |  |
| 11      | 11 58 | 25522                |  | 43      | 28   | 18931                |  | 72      | 29   | 7854                 |  |
| 12      | 13 3  | 25415                |  | 44      | 28   | 18613                |  | 73      | 25   | 7446                 |  |
| 13      | 14 8  | 25299                |  | 45      | 29   | 18291                |  | 74      | 21   | 7037                 |  |
| 14      | 15 13 | 25174                |  | 46      | 29   | 17964                |  | 75      | 17   | 6627                 |  |
| 15      | 16 17 | 25041                |  | 47      | 29   | 17631                |  | 76      | 12   | 6217                 |  |
| 16      | 17 22 | 24898                |  | 47      | 29   | 17294                |  | 77      | 8    | 5808                 |  |
| 17      | 18 27 | 24748                |  | 49      | 28   | 16955                |  | 78      | 3    | 5398                 |  |
| 18      | 19 31 | 24590                |  | 50      | 27   | 16612                |  | 78      | 58   | 4987                 |  |
| 19      | 20 35 | 24423                |  | 51      | 26   | 16264                |  | 79      | 54   | 4575                 |  |
| 20      | 21 39 | 24248                |  | 52      | 25   | 15911                |  | 80      | 49   | 4162                 |  |
| 21      | 22 43 | 24065                |  | 53      | 24   | 15554                |  | 81      | 44   | 3748                 |  |
| 22      | 23 47 | 23873                |  | 54      | 23   | 15194                |  | 82      | 40   | 3333                 |  |
| 23      | 24 51 | 23674                |  | 55      | 21   | 14832                |  | 83      | 35   | 2918                 |  |
| 24      | 25 54 | 23468                |  | 56      | 19   | 14467                |  | 84      | 30   | 2503                 |  |
| 25      | 26 57 | 23255                |  | 57      | 18   | 14098                |  | 85      | 25   | 2087                 |  |
| 26      | 28 0  | 23035                |  | 58      | 16   | 13726                |  | 86      | 20   | 1670                 |  |
| 27      | 29 3  | 22807                |  | 59      | 14   | 13351                |  | 87      | 15   | 1253                 |  |
| 28      | 30 6  | 22571                |  | 60      | 12   | 12973                |  | 88      | 10   | 836                  |  |
| 29      | 31 9  | 22327                |  | 61      | 9    | 12593                |  | 89      | 5    | 418                  |  |
| 30      | 32 11 | 22077                |  | 62      | 0    | 12209                |  | 90      | 0    | 0                    |  |



# Tab. Mediationum

| E        |                    |       | Q        |                    |  | np       |                    |  |
|----------|--------------------|-------|----------|--------------------|--|----------|--------------------|--|
| Radix    | Numer <sup>o</sup> |       | Radix    | Numer <sup>o</sup> |  | Radix    | Numer <sup>o</sup> |  |
| ascensio | multiplis          |       | ascensio | multiplis          |  | ascensio | multiplis          |  |
| num      | cand <sup>o</sup>  |       | num      | cand <sup>o</sup>  |  | num      | cand <sup>o</sup>  |  |
| E        | m                  |       | E        | m                  |  | E        | m                  |  |
| 0        | 90 0               | 0     | 117 54   | 12200              |  | 147 49   | 22077              |  |
| 1        | 90 55              | 418   | 118 51   | 12593              |  | 148 51   | 22327              |  |
| 2        | 91 50              | 836   | 119 48   | 12973              |  | 149 54   | 22571              |  |
| 3        | 92 45              | 1253  | 120 46   | 13351              |  | 150 57   | 22807              |  |
| 4        | 93 40              | 1670  | 121 44   | 13726              |  | 152 0    | 23035              |  |
| 5        | 94 35              | 2087  | 122 42   | 14098              |  | 153 3    | 23255              |  |
| 6        | 95 30              | 2503  | 123 41   | 14467              |  | 154 6    | 23464              |  |
| 7        | 96 25              | 2918  | 124 39   | 14832              |  | 155 9    | 23674              |  |
| 8        | 97 16              | 3333  | 125 37   | 15194              |  | 156 13   | 23873              |  |
| 9        | 98 16              | 3748  | 126 36   | 15554              |  | 157 17   | 24065              |  |
| 10       | 99 11              | 4162  | 127 35   | 15911              |  | 158 21   | 24248              |  |
| 11       | 100 6              | 4575  | 128 34   | 16264              |  | 159 25   | 24423              |  |
| 12       | 101 2              | 4987  | 129 33   | 16612              |  | 160 29   | 24590              |  |
| 13       | 101 57             | 5398  | 130 32   | 16955              |  | 161 33   | 24748              |  |
| 14       | 102 52             | 5808  | 131 31   | 17294              |  | 162 38   | 24898              |  |
| 15       | 103 48             | 6217  | 132 31   | 17631              |  | 163 43   | 25041              |  |
| 16       | 104 43             | 6627  | 133 31   | 17994              |  | 164 47   | 25174              |  |
| 17       | 105 39             | 7037  | 134 31   | 18291              |  | 165 52   | 25299              |  |
| 18       | 106 35             | 7446  | 135 32   | 18613              |  | 166 57   | 25415              |  |
| 19       | 107 31             | 7854  | 136 32   | 18931              |  | 168 2    | 25532              |  |
| 20       | 108 27             | 8260  | 137 32   | 19245              |  | 169 7    | 25610              |  |
| 21       | 109 24             | 8664  | 138 33   | 19554              |  | 170 12   | 25708              |  |
| 22       | 110 20             | 9065  | 139 34   | 19858              |  | 171 17   | 25787              |  |
| 23       | 111 16             | 9465  | 140 35   | 20155              |  | 172 22   | 25857              |  |
| 24       | 112 13             | 9863  | 141 37   | 20447              |  | 173 28   | 25919              |  |
| 25       | 113 9              | 10258 | 142 38   | 20734              |  | 174 33   | 25971              |  |
| 26       | 114 6              | 10652 | 143 40   | 21017              |  | 175 38   | 26013              |  |
| 27       | 115 3              | 11044 | 144 42   | 21292              |  | 176 44   | 26046              |  |
| 28       | 116 0              | 11434 | 145 44   | 21560              |  | 177 49   | 26069              |  |
| 29       | 116 57             | 11823 | 146 46   | 21822              |  | 178 54   | 26084              |  |
| 30       | 117 54             | 12209 | 147 49   | 22077              |  | 180 0    | 26089              |  |



Tabula Generalis

| a       |     |                    |       | m       |    |                    |  | T       |    |                    |  |
|---------|-----|--------------------|-------|---------|----|--------------------|--|---------|----|--------------------|--|
| Radix   |     | Numer <sup>o</sup> |       | Radix   |    | Numer <sup>o</sup> |  | Radix   |    | Numer <sup>o</sup> |  |
| ascēſio |     | multipli           |       | ascēſio |    | multipli           |  | ascēſio |    | multipli           |  |
| num     |     | cand <sup>o</sup>  |       | num     |    | cand <sup>o</sup>  |  | num     |    | cand <sup>o</sup>  |  |
| ſ       | ſ   | m                  |       | ſ       | m  |                    |  | ſ       | m  |                    |  |
| 0       | 180 | 0                  | 26089 | 212     | 11 | 22077              |  | 242     | 6  | 12209              |  |
| 1       | 181 | 6                  | 26084 | 213     | 14 | 21822              |  | 243     | 3  | 11823              |  |
| 2       | 182 | 11                 | 26069 | 214     | 16 | 21560              |  | 244     | 0  | 11434              |  |
| 3       | 183 | 16                 | 26046 | 215     | 18 | 21292              |  | 244     | 57 | 11044              |  |
| 4       | 184 | 22                 | 26013 | 216     | 20 | 21017              |  | 245     | 54 | 10652              |  |
| 5       | 185 | 27                 | 25971 | 217     | 22 | 20734              |  | 246     | 51 | 10258              |  |
| 6       | 186 | 32                 | 25919 | 218     | 23 | 20447              |  | 247     | 47 | 9863               |  |
| 7       | 187 | 38                 | 25857 | 219     | 25 | 20155              |  | 248     | 44 | 9465               |  |
| 8       | 188 | 43                 | 25787 | 220     | 26 | 19858              |  | 249     | 40 | 9065               |  |
| 9       | 189 | 48                 | 25708 | 221     | 27 | 19554              |  | 250     | 36 | 8664               |  |
| 10      | 190 | 53                 | 25619 | 222     | 28 | 19245              |  | 251     | 33 | 8260               |  |
| 11      | 191 | 58                 | 25522 | 223     | 28 | 18931              |  | 252     | 29 | 7854               |  |
| 12      | 193 | 3                  | 25415 | 224     | 28 | 18613              |  | 253     | 25 | 7446               |  |
| 13      | 194 | 8                  | 25249 | 225     | 29 | 18291              |  | 254     | 21 | 7037               |  |
| 14      | 195 | 13                 | 25174 | 226     | 29 | 17964              |  | 255     | 17 | 6627               |  |
| 15      | 196 | 17                 | 25041 | 227     | 29 | 17631              |  | 256     | 12 | 6217               |  |
| 16      | 197 | 22                 | 24898 | 228     | 29 | 17294              |  | 257     | 8  | 5808               |  |
| 17      | 198 | 27                 | 24748 | 229     | 28 | 16955              |  | 258     | 3  | 5398               |  |
| 18      | 199 | 31                 | 24590 | 230     | 27 | 16612              |  | 258     | 58 | 4987               |  |
| 19      | 200 | 35                 | 24423 | 231     | 26 | 16264              |  | 259     | 54 | 4575               |  |
| 20      | 201 | 39                 | 24248 | 232     | 25 | 15911              |  | 260     | 59 | 4165               |  |
| 21      | 202 | 43                 | 24065 | 233     | 24 | 15554              |  | 261     | 44 | 3748               |  |
| 22      | 203 | 47                 | 23873 | 234     | 23 | 15194              |  | 262     | 40 | 3333               |  |
| 23      | 204 | 51                 | 23674 | 235     | 21 | 14432              |  | 263     | 35 | 2918               |  |
| 24      | 205 | 54                 | 23468 | 236     | 19 | 14867              |  | 264     | 30 | 2503               |  |
| 25      | 206 | 57                 | 23255 | 237     | 18 | 14098              |  | 265     | 25 | 2087               |  |
| 26      | 208 | 0                  | 23035 | 238     | 16 | 13726              |  | 266     | 20 | 1670               |  |
| 27      | 209 | 3                  | 22807 | 239     | 14 | 13351              |  | 267     | 15 | 1253               |  |
| 28      | 210 | 6                  | 22571 | 240     | 12 | 12973              |  | 268     | 10 | 836                |  |
| 29      | 211 | 9                  | 22327 | 241     | 9  | 12593              |  | 269     | 5  | 418                |  |
| 30      | 212 | 11                 | 22077 | 242     | 6  | 12209              |  | 270     | 0  | 0                  |  |

In long<sup>m</sup> stelle accipe Arcū seu R<sup>a</sup> ass<sup>a</sup> q<sup>ue</sup> nūz intem<sup>us</sup> dēnde cū dēdōne  
 accipe mltiplicatōe ex tabla p<sup>re</sup>cedēte, postea dūc mltiplicatōe in nūz  
 int<sup>er</sup>, q<sup>ue</sup> ex p<sup>ro</sup>ducto nūz q<sup>u</sup>inq<sup>ue</sup> sup<sup>er</sup> dext<sup>er</sup>as, & residuū arc<sup>us</sup> sin<sup>ist</sup>er<sup>is</sup>  
 arcus: q<sup>ui</sup> Add<sup>at</sup> uel min<sup>u</sup>at<sup>ur</sup> ut hic vid<sup>et</sup>ur. Sep. M.  
 Me<sup>as</sup> <sup>de</sup> d<sup>ext</sup>as. d<sup>ext</sup>: Mer. A  
 69. 0. m<sup>in</sup> d<sup>ext</sup> d<sup>ext</sup>. Sep. A



# Tab. Mediationum

| b        |                    |       | m        |                    |  | x        |                    |  |
|----------|--------------------|-------|----------|--------------------|--|----------|--------------------|--|
| Radix    | Numer <sup>o</sup> |       | Radix    | Numer <sup>o</sup> |  | Radix    | Numer <sup>o</sup> |  |
| ascensio | multipli           |       | ascensio | multipli           |  | ascensio | multipli           |  |
| num      | cand <sup>o</sup>  |       | num      | cand <sup>o</sup>  |  | num      | cand <sup>o</sup>  |  |
| b        | b m                |       | b m      |                    |  | b m      |                    |  |
| 0        | 270 0              | 0     | 297 54   | 12309              |  | 327 49   | 22077              |  |
| 1        | 270 55             | 418   | 298 51   | 12593              |  | 328 51   | 22327              |  |
| 2        | 271 50             | 836   | 299 48   | 12973              |  | 329 54   | 22571              |  |
| 3        | 272 45             | 1253  | 300 46   | 13351              |  | 330 57   | 22807              |  |
| 4        | 273 40             | 1670  | 301 44   | 13726              |  | 332 0    | 23035              |  |
| 5        | 274 35             | 2087  | 302 42   | 14098              |  | 333 3    | 23255              |  |
| 6        | 275 30             | 2503  | 303 41   | 14467              |  | 334 6    | 23468              |  |
| 7        | 276 25             | 2918  | 304 39   | 14832              |  | 335 9    | 23674              |  |
| 8        | 277 20             | 3333  | 305 37   | 15194              |  | 336 13   | 23873              |  |
| 9        | 278 16             | 3748  | 306 36   | 15554              |  | 337 17   | 24065              |  |
| 10       | 279 11             | 4162  | 307 35   | 15911              |  | 338 21   | 24248              |  |
| 11       | 280 6              | 4575  | 308 34   | 16264              |  | 339 25   | 24423              |  |
| 12       | 281 2              | 4987  | 309 33   | 16655              |  | 340 29   | 24590              |  |
| 13       | 281 57             | 5398  | 310 32   | 16994              |  | 341 33   | 24748              |  |
| 14       | 282 52             | 5808  | 311 31   | 17231              |  | 342 38   | 24898              |  |
| 15       | 283 48             | 6217  | 312 31   | 17664              |  | 343 43   | 25041              |  |
| 16       | 284 43             | 6627  | 313 31   | 17991              |  | 344 47   | 25174              |  |
| 17       | 285 39             | 7037  | 314 31   | 18213              |  | 345 52   | 25299              |  |
| 18       | 286 35             | 7446  | 315 32   | 18631              |  | 346 57   | 25415              |  |
| 19       | 287 31             | 7854  | 316 32   | 18931              |  | 348 2    | 25522              |  |
| 20       | 288 27             | 8260  | 317 32   | 19245              |  | 349 7    | 25619              |  |
| 21       | 289 24             | 8664  | 318 33   | 19554              |  | 350 12   | 25708              |  |
| 22       | 290 20             | 9065  | 319 34   | 19858              |  | 351 17   | 25787              |  |
| 23       | 291 16             | 9465  | 320 35   | 20155              |  | 352 22   | 25857              |  |
| 24       | 292 13             | 9863  | 321 37   | 20447              |  | 353 28   | 25919              |  |
| 25       | 293 9              | 10258 | 322 38   | 20734              |  | 354 33   | 25971              |  |
| 26       | 294 6              | 10652 | 323 40   | 21017              |  | 355 38   | 26013              |  |
| 27       | 295 3              | 11044 | 324 42   | 21292              |  | 356 44   | 26046              |  |
| 28       | 296 0              | 11434 | 325 44   | 21560              |  | 357 49   | 26069              |  |
| 29       | 296 57             | 11823 | 326 46   | 21822              |  | 358 54   | 26084              |  |
| 30       | 297 54             | 12209 | 327 49   | 22077              |  | 360 0    | 26089              |  |



Tabula

| Elevatio | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|----------|------|------|------|------|------|------|------|------|
| S        | S m  | S m  | S m  | S m  | S m  | S m  | S m  | S m  |
| 1        | 0 1  | 0 2  | 0 3  | 0 4  | 0 5  | 0 6  | 0 7  | 0 8  |
| 2        | 0 2  | 0 4  | 0 6  | 0 8  | 0 10 | 0 13 | 0 15 | 0 17 |
| 3        | 0 3  | 0 6  | 0 9  | 0 13 | 0 16 | 0 19 | 0 22 | 0 25 |
| 4        | 0 4  | 0 8  | 0 13 | 0 17 | 0 21 | 0 25 | 0 30 | 0 34 |
| 5        | 0 5  | 0 10 | 0 16 | 0 21 | 0 26 | 0 32 | 0 37 | 0 42 |
| 6        | 0 6  | 0 13 | 0 19 | 0 25 | 0 32 | 0 38 | 0 44 | 0 51 |
| 7        | 0 7  | 0 15 | 0 22 | 0 30 | 0 37 | 0 44 | 0 52 | 0 59 |
| 8        | 0 8  | 0 17 | 0 25 | 0 34 | 0 42 | 0 51 | 0 59 | 1 8  |
| 9        | 0 9  | 0 19 | 0 29 | 0 38 | 0 48 | 0 57 | 1 7  | 1 16 |
| De       | 0 11 | 0 21 | 0 32 | 0 42 | 0 53 | 1 4  | 1 14 | 1 25 |
| cli      | 0 12 | 0 23 | 0 35 | 0 47 | 0 58 | 1 10 | 1 22 | 1 34 |
| na       | 0 13 | 0 25 | 0 38 | 0 51 | 1 4  | 1 17 | 1 30 | 1 43 |
| tio      | 0 14 | 0 28 | 0 42 | 0 56 | 1 9  | 1 23 | 1 37 | 1 52 |
| 14       | 0 15 | 0 30 | 0 45 | 1 0  | 1 15 | 1 30 | 1 45 | 2 0  |
| stel     | 0 16 | 0 32 | 0 48 | 1 4  | 1 21 | 1 37 | 1 53 | 2 10 |
| le       | 0 17 | 0 34 | 0 52 | 1 9  | 1 26 | 1 44 | 2 1  | 2 19 |
| 17       | 0 18 | 0 37 | 0 55 | 1 14 | 1 32 | 1 50 | 2 9  | 2 28 |
| 18       | 0 19 | 0 39 | 0 59 | 1 18 | 1 38 | 1 57 | 2 17 | 2 37 |
| 19       | 0 21 | 0 41 | 1 2  | 1 23 | 1 44 | 2 4  | 2 25 | 2 46 |
| 20       | 0 22 | 0 44 | 1 6  | 1 27 | 1 49 | 2 12 | 2 34 | 2 56 |
| 21       | 0 23 | 0 46 | 1 9  | 1 32 | 1 55 | 2 19 | 2 42 | 3 6  |
| 22       | 0 24 | 0 49 | 1 13 | 1 37 | 2 2  | 2 26 | 2 51 | 3 15 |
| 23       | 0 25 | 0 51 | 1 17 | 1 42 | 2 8  | 2 33 | 2 59 | 3 25 |
| 24       | 0 27 | 0 53 | 1 20 | 1 47 | 2 14 | 2 41 | 3 8  | 3 35 |
| 25       | 0 28 | 0 56 | 1 24 | 1 52 | 2 20 | 2 49 | 3 17 | 3 45 |
| 26       | 0 29 | 0 59 | 1 28 | 1 57 | 2 27 | 2 56 | 3 26 | 3 56 |
| 27       | 0 31 | 1 1  | 1 32 | 2 3  | 2 33 | 3 4  | 3 35 | 4 6  |
| 28       | 0 32 | 1 4  | 1 36 | 2 8  | 2 40 | 3 12 | 3 45 | 4 17 |
| 29       | 0 33 | 1 7  | 1 40 | 2 13 | 2 47 | 3 20 | 3 54 | 4 28 |
| 30       | 0 35 | 1 9  | 1 44 | 2 19 | 2 54 | 3 29 | 4 4  | 4 39 |
| 31       | 0 36 | 1 12 | 1 48 | 2 24 | 3 1  | 3 37 | 4 14 | 4 51 |
| 32       | 0 37 | 1 15 | 1 53 | 2 30 | 3 8  | 3 46 | 4 24 | 5 2  |



# Differentiarum Ascensionalium

|    | 9    | 10   | 11   | 12   | 13   | 14   | 15 Poli |
|----|------|------|------|------|------|------|---------|
| B  | B m  | B m  | B m  | B m  | B m  | B m  | B m     |
| 1  | 0 9  | 0 11 | 0 12 | 0 13 | 0 14 | 0 15 | 0 16    |
| 2  | 0 19 | 0 21 | 0 23 | 0 25 | 0 28 | 0 30 | 0 32    |
| 3  | 0 29 | 0 32 | 0 35 | 0 38 | 0 42 | 0 45 | 0 48    |
| 4  | 0 38 | 0 42 | 0 47 | 0 51 | 0 56 | 1 0  | 1 4     |
| 5  | 0 48 | 0 53 | 0 58 | 1 4  | 1 9  | 1 15 | 1 21    |
| 6  | 0 57 | 1 4  | 1 10 | 1 17 | 1 23 | 1 30 | 1 37    |
| 7  | 1 7  | 1 14 | 1 22 | 1 30 | 1 37 | 1 45 | 1 57    |
| 8  | 1 16 | 1 25 | 1 34 | 1 43 | 1 52 | 2 0  | 2 9     |
| 9  | 1 26 | 1 36 | 1 46 | 1 56 | 2 6  | 2 16 | 2 26    |
| 10 | 1 36 | 1 47 | 1 58 | 2 9  | 2 20 | 2 31 | 2 42    |
| 11 | 1 46 | 1 58 | 2 10 | 2 22 | 2 34 | 2 47 | 2 59    |
| 12 | 1 56 | 2 9  | 2 22 | 2 35 | 2 49 | 3 2  | 3 16    |
| 13 | 2 6  | 2 20 | 2 34 | 2 49 | 3 3  | 3 18 | 3 33    |
| 14 | 2 16 | 2 31 | 2 47 | 3 2  | 3 18 | 3 34 | 3 50    |
| 15 | 2 26 | 2 42 | 2 59 | 3 16 | 3 33 | 3 50 | 4 7     |
| 16 | 2 36 | 3 54 | 3 12 | 3 30 | 3 48 | 4 6  | 4 24    |
| 17 | 2 47 | 3 5  | 3 24 | 3 44 | 4 3  | 4 22 | 4 42    |
| 18 | 2 57 | 3 17 | 3 37 | 3 58 | 4 18 | 4 39 | 5 0     |
| 19 | 3 8  | 3 29 | 3 50 | 4 17 | 4 34 | 4 55 | 5 18    |
| 20 | 3 18 | 3 41 | 4 3  | 4 26 | 4 49 | 5 12 | 5 36    |
| 21 | 3 29 | 3 53 | 4 17 | 4 41 | 5 5  | 5 30 | 5 54    |
| 22 | 3 40 | 4 5  | 4 30 | 4 56 | 5 21 | 5 47 | 6 13    |
| 23 | 3 51 | 4 18 | 4 44 | 5 11 | 5 37 | 6 7  | 6 32    |
| 24 | 4 3  | 4 30 | 4 58 | 5 26 | 5 54 | 6 22 | 6 51    |
| 25 | 4 14 | 4 43 | 5 12 | 5 41 | 6 11 | 6 41 | 7 11    |
| 26 | 4 26 | 4 56 | 5 26 | 5 57 | 6 28 | 6 59 | 7 31    |
| 27 | 4 38 | 5 9  | 5 41 | 6 13 | 6 45 | 7 18 | 7 51    |
| 28 | 4 50 | 5 23 | 5 56 | 6 29 | 7 3  | 7 37 | 8 11    |
| 29 | 5 2  | 5 37 | 6 11 | 6 46 | 7 21 | 7 57 | 8 32    |
| 30 | 5 15 | 5 51 | 6 27 | 7 3  | 7 40 | 8 17 | 8 54    |
| 31 | 5 28 | 6 5  | 6 42 | 7 20 | 7 58 | 8 37 | 9 16    |
| 32 | 5 41 | 6 20 | 6 59 | 7 38 | 8 18 | 8 58 | 9 38    |

# Residuum Tabule

| Elevatio | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| D        | D m   | D m   | D m   | D m   | D m   | D m   | D m   | D m   |
| 1        | 0 17  | 0 18  | 0 19  | 0 21  | 0 22  | 0 23  | 0 24  | 0 25  |
| 2        | 0 34  | 0 37  | 0 39  | 0 41  | 0 44  | 0 46  | 0 49  | 0 51  |
| 3        | 0 52  | 0 55  | 0 59  | 1 2   | 1 6   | 1 9   | 1 13  | 1 17  |
| 4        | 1 9   | 1 14  | 1 18  | 1 23  | 1 27  | 1 32  | 1 37  | 1 42  |
| 5        | 1 16  | 1 32  | 1 38  | 1 44  | 1 49  | 1 55  | 2 2   | 2 8   |
| 6        | 1 44  | 1 50  | 1 57  | 2 4   | 2 12  | 2 19  | 2 26  | 2 33  |
| 7        | 2 1   | 2 9   | 2 17  | 2 25  | 2 34  | 2 42  | 2 51  | 2 59  |
| 8        | 2 19  | 2 28  | 2 37  | 2 46  | 2 56  | 3 6   | 3 15  | 3 25  |
| 9        | 2 36  | 2 47  | 2 57  | 3 8   | 3 18  | 3 29  | 3 40  | 3 51  |
| De 10    | 2 54  | 3 5   | 3 17  | 3 29  | 3 41  | 3 53  | 4 5   | 4 18  |
| cli 11   | 3 12  | 3 24  | 3 37  | 3 50  | 4 3   | 4 17  | 4 30  | 4 44  |
| na 12    | 3 30  | 3 44  | 3 58  | 4 12  | 4 26  | 4 41  | 4 56  | 5 11  |
| tio 13   | 3 48  | 4 3   | 4 18  | 4 34  | 4 49  | 5 5   | 5 21  | 5 38  |
| 14       | 4 6   | 4 22  | 4 39  | 4 55  | 5 12  | 5 30  | 5 47  | 6 5   |
| stel 15  | 4 24  | 4 42  | 5 0   | 5 18  | 5 36  | 5 54  | 6 13  | 6 32  |
| le 16    | 4 43  | 5 2   | 5 21  | 5 40  | 5 59  | 6 19  | 6 39  | 6 59  |
| 17       | 5 2   | 5 22  | 5 42  | 6 2   | 6 23  | 6 44  | 7 6   | 7 27  |
| 18       | 5 21  | 5 42  | 6 4   | 6 25  | 6 47  | 7 10  | 7 33  | 7 56  |
| 19       | 5 40  | 6 3   | 6 25  | 6 49  | 7 12  | 7 36  | 8 0   | 8 24  |
| 20       | 5 59  | 6 23  | 6 47  | 7 12  | 7 37  | 8 2   | 8 27  | 8 53  |
| 21       | 6 19  | 6 44  | 7 10  | 7 36  | 8 2   | 8 28  | 8 55  | 9 23  |
| 22       | 6 39  | 7 6   | 7 33  | 8 0   | 8 27  | 8 55  | 9 24  | 9 53  |
| 23       | 6 59  | 7 27  | 7 56  | 8 24  | 8 53  | 9 22  | 9 53  | 10 23 |
| 24       | 7 20  | 7 49  | 8 19  | 8 49  | 9 19  | 9 50  | 10 22 | 10 54 |
| 25       | 7 41  | 8 12  | 8 43  | 9 14  | 9 46  | 10 19 | 10 52 | 11 25 |
| 26       | 8 2   | 8 35  | 9 7   | 9 40  | 10 14 | 10 47 | 11 22 | 11 57 |
| 27       | 8 24  | 8 58  | 9 32  | 10 6  | 10 41 | 11 17 | 11 53 | 12 29 |
| 28       | 8 46  | 9 21  | 9 57  | 10 33 | 11 9  | 11 47 | 12 24 | 13 3  |
| 29       | 9 9   | 9 45  | 10 23 | 11 10 | 11 38 | 12 17 | 12 56 | 13 37 |
| 30       | 9 32  | 10 10 | 10 49 | 11 28 | 12 8  | 12 48 | 13 29 | 14 11 |
| 31       | 9 55  | 10 35 | 11 16 | 11 56 | 12 38 | 13 20 | 14 3  | 14 47 |
| 32       | 10 19 | 11 1  | 11 43 | 12 25 | 13 9  | 13 53 | 14 37 | 15 23 |



# Differentiarum Ascensionalium

|    | 24    | 25    | 26    | 27    | 28    | 29    | 30 Poli |  |
|----|-------|-------|-------|-------|-------|-------|---------|--|
|    | S m   | S m   | S m   | S m   | S m   | S m   | S m     |  |
| 1  | 0 27  | 0 28  | 0 29  | 0 31  | 0 32  | 0 33  | 0 35    |  |
| 2  | 0 53  | 0 56  | 0 59  | 1 1   | 1 4   | 1 7   | 1 9     |  |
| 3  | 1 20  | 1 24  | 1 28  | 1 32  | 1 36  | 1 40  | 1 44    |  |
| 4  | 1 47  | 1 52  | 1 57  | 2 3   | 2 8   | 2 13  | 2 19    |  |
| 5  | 2 14  | 2 20  | 2 27  | 2 33  | 2 40  | 2 47  | 2 54    |  |
| 6  | 2 41  | 2 49  | 2 56  | 3 4   | 3 12  | 3 20  | 3 29    |  |
| 7  | 3 8   | 3 17  | 3 26  | 3 35  | 3 45  | 3 54  | 4 4     |  |
| 8  | 3 35  | 3 45  | 3 56  | 4 6   | 4 17  | 4 28  | 4 39    |  |
| 9  | 4 3   | 4 14  | 4 26  | 4 38  | 4 50  | 5 2   | 5 15    |  |
| 10 | 4 30  | 4 43  | 4 56  | 5 9   | 5 23  | 5 37  | 5 51    |  |
| 11 | 4 58  | 5 12  | 5 26  | 5 41  | 5 56  | 6 11  | 6 27    |  |
| 12 | 5 26  | 5 41  | 5 57  | 6 13  | 6 29  | 6 46  | 7 3     |  |
| 13 | 5 54  | 6 11  | 6 28  | 6 45  | 7 3   | 7 21  | 7 40    |  |
| 14 | 6 22  | 6 41  | 6 59  | 7 18  | 7 37  | 7 56  | 8 17    |  |
| 15 | 6 51  | 7 11  | 7 31  | 7 51  | 8 11  | 8 32  | 8 54    |  |
| 16 | 7 20  | 7 41  | 8 3   | 8 24  | 8 46  | 9 8   | 9 32    |  |
| 17 | 7 49  | 8 12  | 8 35  | 8 58  | 9 21  | 9 45  | 10 10   |  |
| 18 | 8 19  | 8 43  | 9 7   | 9 32  | 9 57  | 10 23 | 10 49   |  |
| 19 | 8 49  | 9 14  | 9 40  | 10 6  | 10 33 | 11 0  | 11 28   |  |
| 20 | 9 19  | 9 46  | 10 14 | 10 41 | 11 9  | 11 38 | 12 8    |  |
| 21 | 9 50  | 10 19 | 10 47 | 11 17 | 11 46 | 12 17 | 12 48   |  |
| 22 | 10 22 | 10 52 | 11 22 | 11 53 | 12 24 | 12 56 | 13 29   |  |
| 23 | 10 54 | 11 25 | 11 57 | 12 29 | 13 3  | 13 37 | 14 11   |  |
| 24 | 11 26 | 11 59 | 12 33 | 13 7  | 13 42 | 14 17 | 14 54   |  |
| 25 | 11 59 | 12 34 | 13 9  | 13 45 | 14 21 | 14 59 | 15 37   |  |
| 26 | 12 33 | 13 9  | 13 46 | 14 23 | 15 2  | 15 41 | 16 21   |  |
| 27 | 13 7  | 13 45 | 14 23 | 15 3  | 15 43 | 16 24 | 17 6    |  |
| 28 | 13 42 | 14 21 | 15 2  | 15 43 | 16 25 | 17 8  | 17 53   |  |
| 29 | 14 17 | 14 59 | 15 41 | 16 24 | 17 8  | 17 54 | 18 40   |  |
| 30 | 14 54 | 15 37 | 16 21 | 17 6  | 17 53 | 18 40 | 19 28   |  |
| 31 | 15 31 | 16 16 | 17 2  | 17 50 | 18 38 | 19 27 | 20 18   |  |
| 32 | 16 9  | 16 56 | 17 45 | 18 34 | 19 24 | 20 16 | 21 9    |  |

# Residuum Tabule

| Elevatio | 31    | 32    | 33    | 34    | 35    | 36    | 37    | 38    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 1        | 0 36  | 0 37  | 0 39  | 0 40  | 0 42  | 0 44  | 0 45  | 0 47  |
| 2        | 1 12  | 1 15  | 1 18  | 1 21  | 1 24  | 1 27  | 1 31  | 1 34  |
| 3        | 1 48  | 1 53  | 1 57  | 2 2   | 2 6   | 2 11  | 2 16  | 2 21  |
| 4        | 2 24  | 2 30  | 2 36  | 2 42  | 2 48  | 2 55  | 3 1   | 3 8   |
| 5        | 3 1   | 3 8   | 3 15  | 3 23  | 3 31  | 3 39  | 3 47  | 3 55  |
| 6        | 3 37  | 3 46  | 3 55  | 4 4   | 4 13  | 4 23  | 4 33  | 4 43  |
| 7        | 4 14  | 4 24  | 4 34  | 4 45  | 4 56  | 5 7   | 5 19  | 5 30  |
| 8        | 4 51  | 5 2   | 5 14  | 5 26  | 5 39  | 5 52  | 6 5   | 6 18  |
| 9        | 5 28  | 5 41  | 5 54  | 6 8   | 6 22  | 6 36  | 6 51  | 7 6   |
| De       | 6 5   | 6 20  | 6 35  | 6 50  | 7 6   | 7 22  | 7 38  | 7 55  |
| cli      | 6 42  | 6 59  | 7 15  | 7 32  | 7 49  | 8 7   | 8 25  | 8 44  |
| na       | 7 20  | 7 38  | 7 56  | 8 15  | 8 34  | 8 53  | 9 13  | 9 34  |
| tio      | 7 58  | 8 18  | 8 37  | 8 58  | 9 18  | 9 39  | 10 1  | 10 24 |
| 14       | 8 37  | 8 58  | 9 19  | 9 41  | 10 3  | 10 26 | 10 50 | 11 14 |
| stel     | 9 16  | 9 38  | 10 1  | 10 25 | 10 49 | 11 14 | 11 39 | 12 5  |
| le       | 9 55  | 10 19 | 10 44 | 11 9  | 11 35 | 12 2  | 12 29 | 12 57 |
| 17       | 10 35 | 11 1  | 11 27 | 11 54 | 12 22 | 12 50 | 13 19 | 13 49 |
| 18       | 11 16 | 11 43 | 12 11 | 12 40 | 13 9  | 13 39 | 14 10 | 14 42 |
| 19       | 11 56 | 12 25 | 12 55 | 13 26 | 13 57 | 14 29 | 15 2  | 15 36 |
| 20       | 12 38 | 13 9  | 13 40 | 14 13 | 14 46 | 15 20 | 15 55 | 16 31 |
| 21       | 13 20 | 13 53 | 14 26 | 15 0  | 15 36 | 16 12 | 16 49 | 17 27 |
| 22       | 14 3  | 14 37 | 15 13 | 15 49 | 16 27 | 17 5  | 17 44 | 18 24 |
| 23       | 14 47 | 15 23 | 16 0  | 16 38 | 17 17 | 17 58 | 18 39 | 19 22 |
| 24       | 15 31 | 16 9  | 16 48 | 17 29 | 18 10 | 18 52 | 19 36 | 20 21 |
| 25       | 16 16 | 16 56 | 17 38 | 18 20 | 19 3  | 19 48 | 20 34 | 21 21 |
| 26       | 17 2  | 17 45 | 18 28 | 19 12 | 19 58 | 20 45 | 21 34 | 22 24 |
| 27       | 17 50 | 18 34 | 19 19 | 20 6  | 20 54 | 21 44 | 22 35 | 23 28 |
| 28       | 18 38 | 19 24 | 20 12 | 21 1  | 21 51 | 22 43 | 23 37 | 24 33 |
| 29       | 19 27 | 20 16 | 21 6  | 21 57 | 22 50 | 23 45 | 24 41 | 25 40 |
| 30       | 20 18 | 21 9  | 22 1  | 22 55 | 23 51 | 24 48 | 25 47 | 26 49 |
| 31       | 21 10 | 22 3  | 22 58 | 23 55 | 24 53 | 25 53 | 26 55 | 28 0  |
| 32       | 22 3  | 22 59 | 23 56 | 24 56 | 25 57 | 27 0  | 28 5  | 29 13 |



# Diferentiarum Ascensionalium

|    | 39    | 40    | 41    | 42    | 43    | 44    | 45    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| S  | S m   | S m   | S m   | S m   | S m   | S m   | S m   |      |
| 1  | 0 49  | 0 50  | 0 52  | 0 54  | 0 56  | 0 58  | 1 0   |      |
| 2  | 1 37  | 1 41  | 1 44  | 1 48  | 1 52  | 1 56  | 2 0   |      |
| 3  | 2 26  | 2 31  | 2 37  | 2 42  | 2 48  | 2 54  | 3 0   |      |
| 4  | 3 15  | 3 22  | 3 29  | 3 37  | 3 44  | 3 52  | 4 1   |      |
| 5  | 4 4   | 4 13  | 4 22  | 4 31  | 4 41  | 4 51  | 5 1   |      |
| 6  | 4 53  | 5 4   | 5 15  | 5 26  | 5 37  | 5 50  | 6 2   |      |
| 7  | 5 42  | 5 55  | 6 8   | 6 21  | 6 34  | 6 49  | 7 3   |      |
| 8  | 6 32  | 6 46  | 7 1   | 7 16  | 7 32  | 7 48  | 8 5   |      |
| 9  | 7 22  | 7 38  | 7 55  | 8 12  | 8 30  | 8 48  | 9 7   |      |
| 10 | 8 13  | 8 30  | 8 49  | 9 8   | 9 28  | 9 48  | 10 9  |      |
| 11 | 9 3   | 9 23  | 9 44  | 10 5  | 10 27 | 10 49 | 11 13 |      |
| 12 | 9 55  | 10 16 | 10 39 | 11 2  | 11 26 | 11 51 | 12 16 |      |
| 13 | 10 46 | 11 10 | 11 35 | 12 0  | 12 26 | 12 53 | 13 21 |      |
| 14 | 11 39 | 12 5  | 12 31 | 12 58 | 13 27 | 13 56 | 14 26 |      |
| 15 | 12 32 | 13 0  | 13 28 | 13 58 | 14 28 | 15 0  | 15 32 |      |
| 16 | 13 26 | 13 55 | 14 26 | 14 58 | 15 31 | 16 5  | 16 40 |      |
| 17 | 14 20 | 14 52 | 15 25 | 15 59 | 16 34 | 17 10 | 17 48 |      |
| 18 | 15 15 | 15 49 | 16 24 | 17 1  | 17 38 | 18 17 | 18 58 |      |
| 19 | 16 11 | 16 48 | 17 25 | 18 4  | 18 44 | 19 25 | 20 9  |      |
| 20 | 17 8  | 17 47 | 18 27 | 19 8  | 19 50 | 20 35 | 21 21 |      |
| 21 | 18 7  | 18 47 | 19 30 | 20 13 | 20 59 | 21 46 | 22 34 |      |
| 22 | 19 6  | 19 49 | 20 34 | 21 20 | 22 8  | 22 58 | 23 50 |      |
| 23 | 20 6  | 20 52 | 21 39 | 22 28 | 23 19 | 24 12 | 25 7  |      |
| 24 | 21 8  | 21 56 | 22 46 | 23 38 | 24 32 | 25 28 | 26 26 |      |
| 25 | 22 11 | 23 2  | 23 55 | 24 50 | 25 47 | 26 46 | 27 48 |      |
| 26 | 23 16 | 24 10 | 25 5  | 26 3  | 27 3  | 28 6  | 29 11 |      |
| 27 | 24 22 | 25 19 | 26 17 | 27 18 | 28 22 | 29 29 | 30 38 |      |
| 28 | 25 30 | 26 30 | 27 31 | 28 36 | 29 44 | 30 54 | 32 7  |      |
| 29 | 26 40 | 27 43 | 28 48 | 29 56 | 31 8  | 32 22 | 33 40 |      |
| 30 | 27 52 | 28 59 | 30 7  | 31 19 | 32 35 | 33 53 | 35 16 |      |
| 31 | 29 7  | 30 17 | 31 29 | 32 45 | 34 5  | 35 28 | 36 56 |      |
| 32 | 30 54 | 31 31 | 32 54 | 34 14 | 35 38 | 37 7  | 38 40 |      |

app<sup>o</sup> D<sup>o</sup>l<sup>o</sup> 7<sup>is</sup> M.  
 D<sup>o</sup>l<sup>o</sup> Moz. A  
 D<sup>o</sup>l<sup>o</sup> 7<sup>is</sup> A  
 D<sup>o</sup>l<sup>o</sup> Moz. M.

3 D 1



# Riduum Tabule

| Elenatio | 46    | 47    | 48    | 49    | 50    | 51    | 52    | 53    | 11  |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| S        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m |
| 1        | 1 2   | 1 4   | 1 7   | 1 9   | 1 12  | 1 14  | 1 17  | 1 20  |     |
| 2        | 2 4   | 2 9   | 2 13  | 2 18  | 2 23  | 2 28  | 2 34  | 2 39  |     |
| 3        | 3 7   | 3 13  | 3 20  | 3 27  | 3 35  | 3 43  | 3 51  | 3 59  |     |
| 4        | 4 9   | 4 18  | 4 27  | 4 37  | 4 47  | 4 57  | 5 8   | 5 19  |     |
| 5        | 5 12  | 5 23  | 5 35  | 5 47  | 5 50  | 6 12  | 6 26  | 6 40  |     |
| 6        | 6 15  | 6 28  | 6 42  | 6 57  | 7 12  | 7 27  | 7 44  | 8 1   |     |
| 7        | 7 18  | 7 34  | 7 50  | 8 7   | 8 25  | 8 43  | 9 2   | 9 23  |     |
| 8        | 8 22  | 8 30  | 8 59  | 9 18  | 9 38  | 10 0  | 10 22 | 10 45 |     |
| 9        | 9 26  | 9 47  | 10 8  | 10 30 | 10 53 | 11 17 | 11 42 | 12 8  |     |
| De       | 10 31 | 10 54 | 11 18 | 11 42 | 12 8  | 12 35 | 13 3  | 13 32 |     |
| cli      | 11 37 | 12 2  | 12 28 | 12 55 | 13 24 | 13 53 | 14 24 | 14 57 |     |
| na       | 12 43 | 13 11 | 13 39 | 14 9  | 14 40 | 15 13 | 15 47 | 16 23 |     |
| rio      | 13 50 | 14 20 | 14 51 | 15 24 | 15 58 | 16 34 | 17 11 | 17 50 |     |
|          | 14 58 | 15 30 | 16 5  | 16 40 | 17 17 | 17 56 | 18 37 | 19 19 |     |
| stel     | 15 7  | 16 42 | 17 19 | 17 57 | 18 39 | 19 19 | 20 4  | 20 50 |     |
| le       | 16 16 | 17 54 | 18 34 | 19 16 | 19 59 | 20 44 | 21 32 | 22 22 |     |
|          | 17 27 | 19 8  | 19 51 | 20 36 | 21 22 | 22 11 | 23 2  | 23 56 |     |
|          | 18 40 | 20 23 | 21 9  | 21 57 | 22 47 | 23 39 | 24 34 | 25 33 |     |
|          | 19 53 | 21 40 | 22 29 | 23 20 | 24 14 | 25 10 | 26 9  | 27 11 |     |
|          | 20 8  | 22 58 | 23 51 | 24 45 | 25 42 | 26 43 | 27 46 | 28 53 |     |
|          | 21 25 | 24 18 | 25 14 | 26 12 | 27 14 | 28 18 | 29 26 | 30 37 |     |
|          | 22 44 | 25 40 | 26 40 | 27 42 | 28 47 | 29 56 | 31 8  | 32 25 |     |
|          | 23 5  | 27 5  | 28 8  | 29 14 | 30 23 | 31 37 | 32 54 | 34 17 |     |
|          | 24 27 | 28 31 | 29 38 | 30 48 | 32 3  | 33 21 | 34 44 | 36 13 |     |
|          | 25 52 | 30 0  | 31 12 | 32 26 | 33 46 | 35 10 | 36 39 | 38 14 |     |
|          | 26 20 | 31 32 | 32 43 | 34 8  | 35 32 | 37 2  | 38 38 | 40 20 |     |
|          | 27 51 | 33 7  | 34 28 | 35 53 | 37 23 | 39 0  | 40 42 | 42 33 |     |
|          | 28 25 | 34 46 | 36 12 | 37 43 | 39 19 | 41 2  | 42 53 | 44 53 |     |
|          | 29 2  | 36 28 | 38 0  | 39 47 | 41 21 | 43 12 | 45 12 | 47 21 |     |
|          | 30 43 | 38 15 | 39 53 | 41 47 | 43 29 | 45 29 | 47 39 | 50 1  |     |
|          | 31 29 | 40 7  | 41 52 | 43 44 | 45 44 | 47 54 | 50 16 | 52 53 |     |
|          | 32 19 | 42 4  | 43 57 | 45 57 | 48 8  | 50 30 | 53 7  | 56 1  |     |



# Differentiarū Ascensionaliū

|    | 54    | 55    | 56    | 57    | 58    | 59    | 60    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |      |
| 1  | 1 23  | 1 26  | 1 29  | 1 32  | 1 36  | 1 40  | 1 44  |      |
| 2  | 2 45  | 2 52  | 2 58  | 3 5   | 3 12  | 3 20  | 3 28  |      |
| 3  | 4 8   | 4 17  | 4 27  | 4 38  | 4 49  | 5 0   | 5 13  |      |
| 4  | 5 31  | 5 44  | 5 57  | 6 11  | 6 25  | 6 41  | 6 57  |      |
| 5  | 6 55  | 7 11  | 7 27  | 7 44  | 8 3   | 8 22  | 8 43  |      |
| 6  | 8 19  | 8 38  | 8 58  | 9 19  | 9 41  | 10 4  | 10 28 |      |
| 7  | 9 44  | 10 6  | 10 29 | 10 54 | 11 20 | 11 47 | 12 17 |      |
| 8  | 11 9  | 11 35 | 12 1  | 12 30 | 13 0  | 13 32 | 14 5  |      |
| 9  | 12 35 | 13 4  | 13 35 | 14 7  | 14 41 | 15 17 | 15 55 |      |
| 10 | 14 3  | 14 35 | 15 9  | 15 45 | 16 23 | 17 4  | 17 47 |      |
| 11 | 15 31 | 16 7  | 16 45 | 17 25 | 18 8  | 18 53 | 19 41 |      |
| 12 | 17 0  | 17 40 | 18 22 | 19 6  | 19 53 | 20 43 | 21 36 |      |
| 13 | 18 32 | 19 15 | 20 1  | 20 50 | 21 41 | 22 36 | 23 34 |      |
| 14 | 20 4  | 20 52 | 21 42 | 22 35 | 23 31 | 24 31 | 25 35 |      |
| 15 | 21 38 | 22 30 | 23 24 | 24 22 | 25 23 | 26 29 | 27 39 |      |
| 16 | 23 15 | 24 10 | 25 9  | 26 12 | 27 19 | 28 30 | 29 47 |      |
| 17 | 24 53 | 25 53 | 26 57 | 28 5  | 29 18 | 30 35 | 31 59 |      |
| 18 | 26 34 | 27 39 | 28 48 | 30 1  | 31 20 | 32 44 | 34 19 |      |
| 19 | 28 17 | 29 27 | 30 41 | 32 1  | 33 26 | 34 58 | 36 37 |      |
| 20 | 30 4  | 31 19 | 32 39 | 34 5  | 35 37 | 37 17 | 39 5  |      |
| 21 | 31 54 | 33 15 | 34 41 | 36 14 | 37 54 | 39 42 | 41 40 |      |
| 22 | 33 47 | 35 14 | 36 48 | 38 28 | 40 17 | 42 15 | 44 25 |      |
| 23 | 35 45 | 37 19 | 39 0  | 40 49 | 42 47 | 44 57 | 47 20 |      |
| 24 | 37 48 | 39 29 | 41 18 | 43 17 | 45 26 | 47 49 | 50 27 |      |
| 25 | 39 59 | 41 45 | 43 44 | 45 54 | 48 16 | 50 54 | 53 52 |      |
| 26 | 42 10 | 44 9  | 46 18 | 48 41 | 51 19 | 54 16 | 57 39 |      |
| 27 | 44 32 | 46 41 | 49 4  | 51 41 | 54 38 | 58 0  | 61 57 |      |
| 28 | 47 2  | 49 24 | 52 1  | 54 58 | 58 19 | 62 14 | 67 4  |      |
| 29 | 49 44 | 52 20 | 55 16 | 58 36 | 62 31 | 67 18 | 73 46 |      |
| 30 | 52 37 | 55 32 | 58 52 | 62 45 | 67 31 | 73 55 | 90 0  |      |
| 31 | 55 48 | 59 6  | 62 58 | 67 42 | 74 4  | 90 0  | 90 0  |      |
| 32 | 59 19 | 63 10 | 67 53 | 74 12 | 90 0  | 90 0  | 90 0  |      |



# Tabula Ascensionum Rectarum

|    | V     | ♄     | ♂     | ♂      | ♂      | ♂      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 27 54 | 57 48 | 90 0   | 122 12 | 152 6  |
| 1  | 0 55  | 28 51 | 58 51 | 91 6   | 123 14 | 153 3  |
| 2  | 1 50  | 29 49 | 59 54 | 92 12  | 124 16 | 154 0  |
| 3  | 2 45  | 30 46 | 60 57 | 93 17  | 125 18 | 154 57 |
| 4  | 3 40  | 31 44 | 62 0  | 94 22  | 126 20 | 155 54 |
| 5  | 4 35  | 32 42 | 63 3  | 95 27  | 127 22 | 156 51 |
| 6  | 5 30  | 33 40 | 64 6  | 96 33  | 128 24 | 157 48 |
| 7  | 6 25  | 34 39 | 65 9  | 97 38  | 129 25 | 158 45 |
| 8  | 7 20  | 35 37 | 66 13 | 98 43  | 130 26 | 159 41 |
| 9  | 8 15  | 36 36 | 67 17 | 99 48  | 131 27 | 160 37 |
| 10 | 9 11  | 37 35 | 68 21 | 100 53 | 132 27 | 161 33 |
| 11 | 10 6  | 38 34 | 69 25 | 101 58 | 133 28 | 162 29 |
| 12 | 11 1  | 39 33 | 70 29 | 103 3  | 134 29 | 163 25 |
| 13 | 11 57 | 40 32 | 71 33 | 104 8  | 135 29 | 164 21 |
| 14 | 12 52 | 41 31 | 72 38 | 105 13 | 136 29 | 165 17 |
| 15 | 13 48 | 42 31 | 73 43 | 106 17 | 137 29 | 166 12 |
| 16 | 14 43 | 43 31 | 74 47 | 107 22 | 138 29 | 167 8  |
| 17 | 15 39 | 44 31 | 75 52 | 108 27 | 139 28 | 168 3  |
| 18 | 16 35 | 45 31 | 76 57 | 109 31 | 140 27 | 168 59 |
| 19 | 17 31 | 46 32 | 78 2  | 110 35 | 141 26 | 169 54 |
| 20 | 18 27 | 47 33 | 79 7  | 111 39 | 142 25 | 170 49 |
| 21 | 19 23 | 48 33 | 80 12 | 112 43 | 143 24 | 171 45 |
| 22 | 20 19 | 49 34 | 81 17 | 113 47 | 144 23 | 172 40 |
| 23 | 21 15 | 50 35 | 82 22 | 114 51 | 145 21 | 173 35 |
| 24 | 22 12 | 51 36 | 83 27 | 115 54 | 146 20 | 174 30 |
| 25 | 23 9  | 52 38 | 84 30 | 116 57 | 147 18 | 175 25 |
| 26 | 24 6  | 53 40 | 85 38 | 118 0  | 148 16 | 176 20 |
| 27 | 25 3  | 54 42 | 86 43 | 119 3  | 149 14 | 177 15 |
| 28 | 26 0  | 55 44 | 87 48 | 120 6  | 150 11 | 178 10 |
| 29 | 26 57 | 56 46 | 88 54 | 121 9  | 151 9  | 179 5  |
| 30 | 27 54 | 57 48 | 90 0  | 122 12 | 152 6  | 180 0  |



Residuum Tabule Ascensionum Rectarum.

| B  | B m    | B m    | B m    | B m    | B m    | B m    | B m |
|----|--------|--------|--------|--------|--------|--------|-----|
| 0  | 180 0  | 207 54 | 237 48 | 270 0  | 302 12 | 332 6  |     |
| 1  | 180 55 | 208 51 | 238 51 | 271 6  | 303 14 | 333 3  |     |
| 2  | 181 50 | 209 49 | 239 54 | 272 12 | 304 16 | 334 0  |     |
| 3  | 182 45 | 210 46 | 240 57 | 273 17 | 305 18 | 334 57 |     |
| 4  | 183 40 | 211 44 | 242 0  | 274 22 | 306 20 | 335 54 |     |
| 5  | 184 35 | 212 42 | 243 3  | 275 27 | 307 22 | 336 51 |     |
| 6  | 185 30 | 213 40 | 244 6  | 276 33 | 308 24 | 337 48 |     |
| 7  | 186 25 | 214 39 | 245 9  | 277 38 | 309 25 | 338 45 |     |
| 8  | 187 20 | 215 37 | 246 13 | 278 43 | 310 26 | 339 41 |     |
| 9  | 188 15 | 216 36 | 247 17 | 279 48 | 311 27 | 340 37 |     |
| 10 | 189 11 | 217 35 | 248 21 | 280 53 | 312 27 | 341 33 |     |
| 11 | 190 6  | 218 34 | 249 25 | 281 58 | 313 28 | 342 29 |     |
| 12 | 191 1  | 219 33 | 250 29 | 283 3  | 314 29 | 343 25 |     |
| 13 | 191 57 | 220 32 | 251 33 | 284 8  | 315 29 | 344 21 |     |
| 14 | 192 52 | 221 31 | 252 38 | 285 13 | 316 29 | 345 17 |     |
| 15 | 193 48 | 222 31 | 253 43 | 286 17 | 317 29 | 346 12 |     |
| 16 | 194 43 | 223 31 | 254 47 | 287 22 | 318 29 | 347 8  |     |
| 17 | 195 39 | 224 31 | 255 52 | 288 27 | 319 28 | 348 3  |     |
| 18 | 196 35 | 225 31 | 256 57 | 289 31 | 320 27 | 348 59 |     |
| 19 | 197 31 | 226 32 | 258 2  | 290 35 | 321 26 | 349 54 |     |
| 20 | 198 27 | 227 33 | 259 7  | 291 39 | 322 25 | 350 50 |     |
| 21 | 199 23 | 228 33 | 260 12 | 292 43 | 323 24 | 351 45 |     |
| 22 | 200 19 | 229 34 | 261 17 | 293 45 | 324 23 | 352 40 |     |
| 23 | 201 15 | 230 35 | 262 22 | 294 51 | 325 21 | 353 35 |     |
| 24 | 202 12 | 231 36 | 263 27 | 295 54 | 326 20 | 354 30 |     |
| 25 | 203 9  | 232 38 | 264 33 | 296 57 | 327 18 | 355 25 |     |
| 26 | 204 6  | 233 40 | 265 38 | 298 0  | 328 16 | 356 20 |     |
| 27 | 205 3  | 234 42 | 266 43 | 299 3  | 329 14 | 357 15 |     |
| 28 | 206 0  | 235 44 | 267 48 | 300 6  | 330 11 | 358 10 |     |
| 29 | 206 57 | 236 46 | 268 54 | 301 9  | 331 9  | 359 5  |     |
| 30 | 207 54 | 237 48 | 270 0  | 302 12 | 332 6  | 360 0  |     |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 27 42 | 57 26 | 89 34  | 121 50 | 151 54 |
| 1  | 0 54  | 28 39 | 58 28 | 90 40  | 122 53 | 152 52 |
| 2  | 1 49  | 29 36 | 59 31 | 91 45  | 123 55 | 153 49 |
| 3  | 2 43  | 30 33 | 60 34 | 92 51  | 124 57 | 154 47 |
| 4  | 3 38  | 31 30 | 61 37 | 93 56  | 125 59 | 155 44 |
| 5  | 4 33  | 32 28 | 62 40 | 95 1   | 127 1  | 156 41 |
| 6  | 5 27  | 33 26 | 63 43 | 96 7   | 128 3  | 157 38 |
| 7  | 6 22  | 34 24 | 64 46 | 97 12  | 129 4  | 158 35 |
| 8  | 7 17  | 35 22 | 65 50 | 98 17  | 130 6  | 159 32 |
| 9  | 8 12  | 36 20 | 66 53 | 99 22  | 131 7  | 160 29 |
| 10 | 9 7   | 37 19 | 67 57 | 100 27 | 132 8  | 161 25 |
| 11 | 10 2  | 38 17 | 69 1  | 101 32 | 133 9  | 162 22 |
| 12 | 10 57 | 39 16 | 70 5  | 102 37 | 134 10 | 163 18 |
| 13 | 11 52 | 40 15 | 71 9  | 103 42 | 135 10 | 164 14 |
| 14 | 12 47 | 41 14 | 72 13 | 104 47 | 136 11 | 165 10 |
| 15 | 13 42 | 42 13 | 73 18 | 105 52 | 137 11 | 166 6  |
| 16 | 14 37 | 43 13 | 74 22 | 106 57 | 138 11 | 167 2  |
| 17 | 15 32 | 44 13 | 75 27 | 108 2  | 139 11 | 167 58 |
| 18 | 16 28 | 45 13 | 76 31 | 109 6  | 140 10 | 168 54 |
| 19 | 17 23 | 46 13 | 77 36 | 110 11 | 141 10 | 169 50 |
| 20 | 18 19 | 47 14 | 78 41 | 111 15 | 142 9  | 170 45 |
| 21 | 19 15 | 48 14 | 79 46 | 112 19 | 143 8  | 171 41 |
| 22 | 20 11 | 49 15 | 80 51 | 113 23 | 144 7  | 172 37 |
| 23 | 21 7  | 50 15 | 81 56 | 114 27 | 145 6  | 173 32 |
| 24 | 22 3  | 51 16 | 83 1  | 115 31 | 146 5  | 174 28 |
| 25 | 22 59 | 52 17 | 84 7  | 116 34 | 147 4  | 175 23 |
| 26 | 23 55 | 53 18 | 85 12 | 117 38 | 148 2  | 176 19 |
| 27 | 24 52 | 54 20 | 86 17 | 118 41 | 149 0  | 177 14 |
| 28 | 25 48 | 55 22 | 87 23 | 119 44 | 149 58 | 178 10 |
| 29 | 26 45 | 56 24 | 88 28 | 120 47 | 150 56 | 179 5  |
| 30 | 27 42 | 57 26 | 89 34 | 121 50 | 151 54 | 180 0  |



Ad latitudinem .i. Gradus

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎   |
|----|--------|--------|--------|--------|--------|--------|-----|
| h  | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 208 6  | 238 10 | 270 26 | 302 34 | 332 18 |     |
| 1  | 180 55 | 209 4  | 239 13 | 271 32 | 303 36 | 333 15 |     |
| 2  | 181 50 | 210 2  | 240 16 | 272 37 | 304 38 | 334 12 |     |
| 3  | 182 46 | 211 0  | 241 19 | 273 43 | 305 40 | 335 8  |     |
| 4  | 183 41 | 211 58 | 242 22 | 274 48 | 306 42 | 336 5  |     |
| 5  | 184 37 | 212 56 | 243 26 | 275 53 | 307 43 | 337 1  |     |
| 6  | 185 32 | 213 55 | 244 29 | 276 59 | 308 44 | 337 57 |     |
| 7  | 186 28 | 214 54 | 245 33 | 278 4  | 309 45 | 338 53 |     |
| 8  | 187 23 | 215 53 | 246 37 | 279 9  | 310 45 | 339 49 |     |
| 9  | 188 19 | 216 52 | 247 41 | 280 14 | 311 46 | 340 45 |     |
| 10 | 189 15 | 217 51 | 248 45 | 281 19 | 312 46 | 341 41 |     |
| 11 | 190 10 | 218 50 | 249 49 | 282 24 | 313 47 | 342 37 |     |
| 12 | 191 6  | 219 50 | 250 54 | 283 29 | 314 47 | 343 32 |     |
| 13 | 192 2  | 220 49 | 251 58 | 284 33 | 315 47 | 344 28 |     |
| 14 | 192 58 | 221 49 | 253 3  | 285 38 | 316 47 | 345 23 |     |
| 15 | 193 54 | 222 49 | 254 8  | 286 42 | 317 47 | 346 18 |     |
| 16 | 194 50 | 223 49 | 255 13 | 287 47 | 318 46 | 347 13 |     |
| 17 | 195 46 | 224 50 | 256 18 | 288 51 | 319 45 | 348 8  |     |
| 18 | 196 42 | 225 50 | 257 23 | 289 55 | 320 44 | 349 3  |     |
| 19 | 197 38 | 226 51 | 258 28 | 290 59 | 321 43 | 349 58 |     |
| 20 | 198 35 | 227 52 | 259 33 | 292 3  | 322 41 | 350 53 |     |
| 21 | 199 31 | 228 53 | 260 38 | 293 7  | 323 40 | 351 48 |     |
| 22 | 200 28 | 229 54 | 261 43 | 294 10 | 324 38 | 352 43 |     |
| 23 | 201 25 | 230 56 | 262 48 | 295 14 | 325 36 | 353 38 |     |
| 24 | 202 22 | 231 57 | 263 53 | 296 17 | 326 34 | 354 33 |     |
| 25 | 203 19 | 232 59 | 264 59 | 297 20 | 327 32 | 355 27 |     |
| 26 | 204 16 | 234 1  | 266 4  | 298 23 | 328 30 | 356 22 |     |
| 27 | 205 13 | 235 3  | 267 9  | 299 26 | 329 27 | 357 17 |     |
| 28 | 206 11 | 236 5  | 268 15 | 300 29 | 330 24 | 358 11 |     |
| 29 | 207 8  | 237 7  | 269 20 | 301 32 | 331 21 | 359 6  |     |
| 30 | 208 6  | 238 10 | 270 26 | 302 34 | 332 18 | 360 0  |     |

Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 27 30 | 57 4  | 89 8   | 121 20 | 151 42 |
| 1  | 0 54  | 28 26 | 58 6  | 90 14  | 122 31 | 152 40 |
| 2  | 1 48  | 29 23 | 59 8  | 91 19  | 123 33 | 153 38 |
| 3  | 2 42  | 30 20 | 60 11 | 92 25  | 124 36 | 154 35 |
| 4  | 3 38  | 31 17 | 61 13 | 93 30  | 125 38 | 155 33 |
| 5  | 4 31  | 32 14 | 62 16 | 94 35  | 126 40 | 156 30 |
| 6  | 5 25  | 33 11 | 63 19 | 95 41  | 127 42 | 157 28 |
| 7  | 6 19  | 34 9  | 64 22 | 96 46  | 128 44 | 158 25 |
| 8  | 7 14  | 35 7  | 65 25 | 97 52  | 129 45 | 159 22 |
| 9  | 8 8   | 36 5  | 66 28 | 98 57  | 130 47 | 160 19 |
| 10 | 9 3   | 37 3  | 67 32 | 100 2  | 131 48 | 161 16 |
| 11 | 9 57  | 38 1  | 68 36 | 101 7  | 132 50 | 162 13 |
| 12 | 10 52 | 39 0  | 69 40 | 102 12 | 133 51 | 163 10 |
| 13 | 11 46 | 39 58 | 70 44 | 103 17 | 134 52 | 164 7  |
| 14 | 12 41 | 40 57 | 71 48 | 104 22 | 135 53 | 165 4  |
| 15 | 13 36 | 41 56 | 72 53 | 105 27 | 136 54 | 166 0  |
| 16 | 14 30 | 42 55 | 73 57 | 106 32 | 137 54 | 166 57 |
| 17 | 15 25 | 43 55 | 75 2  | 107 37 | 138 54 | 167 53 |
| 18 | 16 20 | 44 54 | 76 6  | 108 41 | 139 54 | 168 49 |
| 19 | 17 15 | 45 54 | 77 11 | 109 46 | 140 54 | 169 45 |
| 20 | 18 10 | 46 54 | 78 16 | 110 50 | 141 53 | 170 41 |
| 21 | 19 5  | 47 54 | 79 21 | 111 54 | 142 53 | 171 37 |
| 22 | 20 1  | 48 54 | 80 26 | 112 58 | 143 52 | 172 33 |
| 23 | 20 56 | 49 55 | 81 31 | 114 2  | 144 52 | 173 29 |
| 24 | 21 52 | 50 55 | 82 36 | 115 6  | 145 51 | 174 25 |
| 25 | 22 48 | 51 56 | 83 41 | 116 10 | 146 50 | 175 21 |
| 26 | 23 44 | 52 57 | 84 46 | 117 14 | 147 49 | 176 17 |
| 27 | 24 40 | 53 59 | 85 51 | 118 18 | 148 47 | 177 13 |
| 28 | 25 37 | 55 0  | 86 57 | 119 21 | 149 46 | 178 9  |
| 29 | 26 33 | 56 2  | 88 2  | 120 25 | 150 44 | 179 5  |
| 30 | 27 30 | 57 4  | 89 8  | 121 28 | 151 42 | 180 0  |



Ad latitudinem .2. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 9  | 208 18 | 238 32 | 270 52 | 302 56 | 332 30 |
| 1  | 180 55 | 209 16 | 239 35 | 271 58 | 303 58 | 333 27 |
| 2  | 181 51 | 210 14 | 240 39 | 273 3  | 305 0  | 334 23 |
| 3  | 182 47 | 211 13 | 241 42 | 274 9  | 306 1  | 335 20 |
| 4  | 183 43 | 212 11 | 242 46 | 275 14 | 307 3  | 336 16 |
| 5  | 184 39 | 213 10 | 243 50 | 276 19 | 308 4  | 337 12 |
| 6  | 185 35 | 214 9  | 244 54 | 277 24 | 309 5  | 338 8  |
| 7  | 186 31 | 215 8  | 245 58 | 278 29 | 310 5  | 339 4  |
| 8  | 187 27 | 216 8  | 247 2  | 279 34 | 311 6  | 339 59 |
| 9  | 188 23 | 217 7  | 248 6  | 280 39 | 312 6  | 340 55 |
| 10 | 189 19 | 218 7  | 249 10 | 281 44 | 313 6  | 341 50 |
| 11 | 190 15 | 219 6  | 250 14 | 282 49 | 314 6  | 342 45 |
| 12 | 191 11 | 220 6  | 251 19 | 283 54 | 315 6  | 343 40 |
| 13 | 192 7  | 221 6  | 252 23 | 284 58 | 316 5  | 344 35 |
| 14 | 193 3  | 222 6  | 253 28 | 286 3  | 317 5  | 345 30 |
| 15 | 194 0  | 223 6  | 254 33 | 287 7  | 318 4  | 346 24 |
| 16 | 194 56 | 224 7  | 255 38 | 288 12 | 319 3  | 347 19 |
| 17 | 195 53 | 225 8  | 256 43 | 289 16 | 320 2  | 348 14 |
| 18 | 196 50 | 226 9  | 257 48 | 290 20 | 321 0  | 349 8  |
| 19 | 197 47 | 227 10 | 258 53 | 291 24 | 321 59 | 350 3  |
| 20 | 198 44 | 228 12 | 259 58 | 292 28 | 322 57 | 350 57 |
| 21 | 199 41 | 229 13 | 261 3  | 293 32 | 323 55 | 351 52 |
| 22 | 200 38 | 230 15 | 262 8  | 294 35 | 324 53 | 352 46 |
| 23 | 201 35 | 231 16 | 263 14 | 295 38 | 325 51 | 353 41 |
| 24 | 202 32 | 232 18 | 264 19 | 296 41 | 326 49 | 354 35 |
| 25 | 203 30 | 233 20 | 265 25 | 297 44 | 327 46 | 355 29 |
| 26 | 204 27 | 234 22 | 266 30 | 298 47 | 328 43 | 356 24 |
| 27 | 205 25 | 235 24 | 267 35 | 299 49 | 329 40 | 357 18 |
| 28 | 206 22 | 236 27 | 268 41 | 300 52 | 330 37 | 358 12 |
| 29 | 207 20 | 237 29 | 269 46 | 301 54 | 331 34 | 359 6  |
| 30 | 208 18 | 238 32 | 270 52 | 302 56 | 332 30 | 360 0  |

Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 27 17 | 56 42 | 88 42  | 121 6  | 151 20 |
| 1  | 0 53  | 28 13 | 57 44 | 89 48  | 122 9  | 152 28 |
| 2  | 1 47  | 29 10 | 58 46 | 90 53  | 123 12 | 153 26 |
| 3  | 2 41  | 30 6  | 59 48 | 91 59  | 124 15 | 154 24 |
| 4  | 3 35  | 31 3  | 60 50 | 93 4   | 125 18 | 155 23 |
| 5  | 4 29  | 32 0  | 61 53 | 94 9   | 126 20 | 156 20 |
| 6  | 5 22  | 32 57 | 62 55 | 95 15  | 127 22 | 157 18 |
| 7  | 6 16  | 33 54 | 63 59 | 96 20  | 128 24 | 158 16 |
| 8  | 7 10  | 34 52 | 65 2  | 97 26  | 129 26 | 159 13 |
| 9  | 8 4   | 35 49 | 66 5  | 98 31  | 130 28 | 160 11 |
| 10 | 8 58  | 36 47 | 67 8  | 99 36  | 131 29 | 161 8  |
| 11 | 9 52  | 37 45 | 68 12 | 100 42 | 132 31 | 162 5  |
| 12 | 10 46 | 38 42 | 69 16 | 101 47 | 133 32 | 163 2  |
| 13 | 11 40 | 39 41 | 70 20 | 102 52 | 134 34 | 163 59 |
| 14 | 12 34 | 40 39 | 71 24 | 103 57 | 135 35 | 164 56 |
| 15 | 13 29 | 41 38 | 72 28 | 105 2  | 136 36 | 165 53 |
| 16 | 14 23 | 42 37 | 73 32 | 106 7  | 137 37 | 166 50 |
| 17 | 15 18 | 43 36 | 74 36 | 107 12 | 138 37 | 167 47 |
| 18 | 16 12 | 44 36 | 75 41 | 108 17 | 139 37 | 168 43 |
| 19 | 17 7  | 45 35 | 76 45 | 109 22 | 140 37 | 169 40 |
| 20 | 18 2  | 46 35 | 77 50 | 110 26 | 141 37 | 170 36 |
| 21 | 18 57 | 47 35 | 78 55 | 111 31 | 142 37 | 171 33 |
| 22 | 19 52 | 48 35 | 80 0  | 112 35 | 143 37 | 172 30 |
| 23 | 20 47 | 49 35 | 81 5  | 113 39 | 144 37 | 173 26 |
| 24 | 21 42 | 50 35 | 82 10 | 114 43 | 145 37 | 174 23 |
| 25 | 22 38 | 51 36 | 83 15 | 115 47 | 146 36 | 175 19 |
| 26 | 23 33 | 52 37 | 84 20 | 116 51 | 147 35 | 176 16 |
| 27 | 24 29 | 53 38 | 85 25 | 117 55 | 148 34 | 177 12 |
| 28 | 25 25 | 54 39 | 86 31 | 118 59 | 149 32 | 178 8  |
| 29 | 26 21 | 55 40 | 87 36 | 120 3  | 150 31 | 179 4  |
| 30 | 27 17 | 56 42 | 88 42 | 121 6  | 151 29 | 180 0  |



Ad latitudinem .3. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 208 31 | 238 54 | 271 18 | 303 18 | 332 43 |
| 1  | 180 56 | 209 29 | 239 57 | 272 24 | 304 20 | 333 39 |
| 2  | 181 52 | 210 28 | 241 1  | 273 29 | 305 21 | 334 35 |
| 3  | 182 48 | 211 26 | 242 5  | 274 35 | 306 22 | 335 31 |
| 4  | 183 44 | 212 25 | 243 9  | 275 40 | 307 23 | 336 27 |
| 5  | 184 41 | 213 24 | 244 13 | 276 45 | 308 24 | 337 22 |
| 6  | 185 37 | 214 23 | 245 17 | 277 50 | 309 25 | 338 18 |
| 7  | 186 34 | 215 23 | 246 21 | 278 55 | 310 25 | 339 13 |
| 8  | 187 30 | 216 23 | 247 25 | 280 0  | 311 25 | 340 8  |
| 9  | 188 27 | 217 23 | 248 29 | 281 5  | 312 25 | 341 3  |
| 10 | 189 24 | 218 23 | 249 34 | 282 10 | 313 25 | 341 58 |
| 11 | 190 20 | 219 23 | 250 38 | 283 15 | 314 25 | 342 53 |
| 12 | 191 17 | 220 23 | 251 43 | 284 19 | 315 24 | 343 48 |
| 13 | 192 13 | 221 23 | 252 48 | 285 24 | 316 24 | 344 42 |
| 14 | 193 10 | 222 23 | 253 53 | 286 28 | 317 23 | 345 37 |
| 15 | 194 7  | 223 24 | 254 58 | 287 32 | 318 22 | 346 31 |
| 16 | 195 4  | 224 25 | 256 3  | 288 36 | 319 21 | 347 26 |
| 17 | 196 1  | 225 26 | 257 8  | 289 40 | 320 19 | 348 20 |
| 18 | 196 58 | 226 28 | 258 13 | 290 44 | 321 17 | 349 14 |
| 19 | 197 55 | 227 29 | 259 18 | 291 48 | 322 15 | 350 8  |
| 20 | 198 52 | 228 31 | 260 24 | 292 52 | 323 13 | 351 2  |
| 21 | 199 49 | 229 32 | 261 29 | 293 55 | 324 11 | 351 56 |
| 22 | 200 47 | 230 34 | 262 34 | 294 58 | 325 8  | 352 50 |
| 23 | 201 44 | 231 36 | 263 40 | 296 1  | 326 6  | 353 44 |
| 24 | 202 42 | 232 38 | 264 45 | 297 4  | 327 3  | 354 38 |
| 25 | 203 40 | 233 40 | 265 51 | 298 7  | 328 0  | 355 31 |
| 26 | 204 38 | 234 42 | 266 56 | 299 10 | 328 57 | 356 25 |
| 27 | 205 36 | 235 45 | 268 1  | 300 12 | 329 54 | 357 19 |
| 28 | 206 34 | 236 48 | 269 7  | 301 14 | 330 50 | 358 13 |
| 29 | 207 32 | 237 51 | 270 12 | 302 16 | 331 47 | 359 7  |
| 30 | 208 31 | 238 54 | 271 18 | 303 18 | 332 43 | 360 0  |



Tabula Ascensionum Obliquarum.

|          | $\gamma$   | $\delta$   | $\pi$      | $\epsilon$ | $\Omega$   | $\eta$     |
|----------|------------|------------|------------|------------|------------|------------|
| $\delta$ | $\delta$ m | $\delta$ m | $\delta$ m | $\delta$ m | $\delta$ m | $\delta$ m |
| 0        | 0 0        | 27 5       | 56 20      | 88 15      | 120 44     | 151 17     |
| 1        | 0 53       | 28 1       | 57 22      | 89 21      | 121 47     | 152 16     |
| 2        | 1 46       | 28 57      | 58 24      | 90 27      | 122 50     | 153 15     |
| 3        | 2 40       | 29 53      | 59 26      | 91 32      | 123 53     | 154 13     |
| 4        | 3 33       | 30 49      | 60 28      | 92 38      | 124 56     | 155 12     |
| 5        | 4 27       | 31 46      | 61 30      | 93 43      | 125 59     | 156 10     |
| 6        | 5 20       | 32 43      | 62 32      | 94 48      | 127 2      | 157 8      |
| 7        | 6 13       | 33 40      | 63 35      | 95 54      | 128 4      | 158 6      |
| 8        | 7 7        | 34 37      | 64 38      | 97 0       | 129 6      | 159 4      |
| 9        | 8 0        | 35 34      | 65 41      | 98 5       | 130 8      | 160 2      |
| 10       | 8 54       | 36 31      | 66 44      | 99 10      | 131 10     | 161 0      |
| 11       | 9 47       | 37 28      | 67 47      | 100 16     | 132 12     | 161 58     |
| 12       | 10 41      | 38 26      | 68 51      | 101 21     | 133 14     | 162 55     |
| 13       | 11 35      | 39 24      | 69 55      | 102 27     | 134 15     | 163 53     |
| 14       | 12 29      | 40 22      | 70 59      | 103 32     | 135 17     | 164 50     |
| 15       | 13 23      | 41 20      | 72 3       | 104 37     | 136 18     | 165 47     |
| 16       | 14 17      | 42 19      | 73 7       | 105 42     | 137 19     | 166 44     |
| 17       | 15 11      | 43 18      | 74 11      | 106 47     | 138 20     | 167 41     |
| 18       | 16 5       | 44 17      | 75 15      | 107 52     | 139 20     | 168 38     |
| 19       | 16 59      | 45 16      | 76 19      | 108 57     | 140 21     | 169 35     |
| 20       | 17 54      | 46 15      | 77 24      | 110 2      | 141 21     | 170 32     |
| 21       | 18 48      | 47 15      | 78 29      | 111 7      | 142 22     | 171 29     |
| 22       | 19 43      | 48 15      | 79 34      | 112 11     | 143 22     | 172 26     |
| 23       | 20 38      | 49 15      | 80 39      | 113 16     | 144 22     | 173 23     |
| 24       | 21 35      | 50 15      | 81 44      | 114 20     | 145 22     | 174 20     |
| 25       | 22 28      | 51 15      | 82 49      | 115 24     | 146 22     | 175 17     |
| 26       | 23 23      | 52 16      | 83 54      | 116 28     | 147 21     | 176 14     |
| 27       | 24 18      | 53 17      | 84 59      | 117 32     | 148 20     | 177 11     |
| 28       | 25 14      | 54 18      | 86 4       | 118 36     | 149 19     | 178 7      |
| 29       | 26 9       | 55 19      | 87 9       | 119 40     | 150 18     | 179 4      |
| 30       | 27 5       | 56 20      | 88 15      | 120 44     | 151 17     | 180 0      |



Ad latitudinem .4. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 208 43 | 239 16 | 271 45 | 303 40 | 332 55 |
| 1  | 180 56 | 209 42 | 240 20 | 272 51 | 304 41 | 333 51 |
| 2  | 181 53 | 210 41 | 241 24 | 273 56 | 305 42 | 334 46 |
| 3  | 182 49 | 211 40 | 242 28 | 275 1  | 306 43 | 335 42 |
| 4  | 183 46 | 212 39 | 243 32 | 276 6  | 307 44 | 336 37 |
| 5  | 184 43 | 213 38 | 244 36 | 277 11 | 308 45 | 337 32 |
| 6  | 185 40 | 214 38 | 245 40 | 278 16 | 309 45 | 338 25 |
| 7  | 186 37 | 215 38 | 246 44 | 279 21 | 310 45 | 339 22 |
| 8  | 187 34 | 216 38 | 247 49 | 280 26 | 311 45 | 340 17 |
| 9  | 188 31 | 217 38 | 248 53 | 281 31 | 312 45 | 341 12 |
| 10 | 189 28 | 218 39 | 249 58 | 282 36 | 313 45 | 342 9  |
| 11 | 190 25 | 219 39 | 251 3  | 283 41 | 314 44 | 343 1  |
| 12 | 191 22 | 220 40 | 252 8  | 284 45 | 315 43 | 343 55 |
| 13 | 192 19 | 221 40 | 253 13 | 285 49 | 316 42 | 344 49 |
| 14 | 193 16 | 222 41 | 254 18 | 286 53 | 317 41 | 345 42 |
| 15 | 194 13 | 223 42 | 255 23 | 287 57 | 318 40 | 346 37 |
| 16 | 195 10 | 224 43 | 256 28 | 289 1  | 319 38 | 347 31 |
| 17 | 196 7  | 225 45 | 257 33 | 290 5  | 320 36 | 348 25 |
| 18 | 197 5  | 226 46 | 258 39 | 291 9  | 321 34 | 349 19 |
| 19 | 198 2  | 227 48 | 259 44 | 292 13 | 322 32 | 350 13 |
| 20 | 199 0  | 228 50 | 260 50 | 293 16 | 323 29 | 351 6  |
| 21 | 199 58 | 229 52 | 261 55 | 294 19 | 324 26 | 352 0  |
| 22 | 200 56 | 230 54 | 263 0  | 295 22 | 325 23 | 352 53 |
| 23 | 201 54 | 231 56 | 264 6  | 296 25 | 326 20 | 353 47 |
| 24 | 202 52 | 232 58 | 265 11 | 297 28 | 327 17 | 354 40 |
| 25 | 203 50 | 234 1  | 266 17 | 298 30 | 328 14 | 355 33 |
| 26 | 204 48 | 235 4  | 267 22 | 299 32 | 329 11 | 356 27 |
| 27 | 205 47 | 236 7  | 268 28 | 300 34 | 330 7  | 357 20 |
| 28 | 206 45 | 237 10 | 269 33 | 301 36 | 331 3  | 358 14 |
| 29 | 207 44 | 238 13 | 270 39 | 301 38 | 331 59 | 359 7  |
| 30 | 208 43 | 239 16 | 271 45 | 303 40 | 332 55 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | Ω      | mp     |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 26 53 | 55 57 | 87 49  | 120 21 | 151 5  |
| 1  | 0 53  | 27 48 | 56 58 | 88 55  | 121 25 | 152 4  |
| 2  | 1 46  | 28 44 | 58 0  | 90 1   | 122 28 | 153 3  |
| 3  | 2 39  | 29 39 | 59 2  | 91 6   | 123 32 | 154 2  |
| 4  | 3 32  | 30 25 | 60 4  | 92 12  | 124 35 | 155 1  |
| 5  | 4 25  | 31 31 | 61 6  | 93 17  | 125 38 | 156 0  |
| 6  | 5 18  | 32 27 | 62 8  | 94 23  | 126 41 | 156 59 |
| 7  | 6 11  | 33 24 | 63 11 | 95 29  | 127 44 | 157 57 |
| 8  | 7 4   | 34 21 | 64 13 | 96 34  | 128 46 | 158 56 |
| 9  | 7 57  | 35 18 | 65 16 | 97 40  | 129 49 | 159 54 |
| 10 | 8 50  | 36 15 | 66 19 | 98 45  | 130 51 | 160 52 |
| 11 | 9 43  | 37 12 | 67 22 | 99 51  | 131 53 | 161 50 |
| 12 | 10 36 | 38 10 | 68 26 | 100 56 | 132 55 | 162 48 |
| 13 | 11 30 | 39 7  | 69 29 | 102 1  | 133 57 | 163 46 |
| 14 | 12 23 | 40 5  | 70 33 | 103 6  | 134 59 | 164 44 |
| 15 | 13 17 | 41 3  | 71 37 | 104 11 | 136 1  | 165 41 |
| 16 | 14 10 | 42 1  | 72 41 | 105 17 | 137 2  | 166 39 |
| 17 | 15 4  | 43 0  | 73 45 | 106 22 | 138 3  | 167 36 |
| 18 | 15 58 | 43 59 | 74 50 | 107 27 | 139 4  | 168 34 |
| 19 | 16 52 | 44 58 | 75 54 | 108 32 | 140 5  | 169 31 |
| 20 | 17 46 | 45 57 | 76 59 | 109 37 | 141 5  | 170 28 |
| 21 | 18 40 | 46 56 | 78 3  | 110 42 | 142 6  | 171 26 |
| 22 | 19 34 | 47 55 | 79 8  | 111 47 | 143 6  | 172 23 |
| 23 | 20 29 | 48 55 | 80 13 | 112 51 | 144 7  | 173 21 |
| 24 | 21 23 | 49 54 | 81 18 | 113 56 | 145 7  | 174 18 |
| 25 | 22 18 | 50 54 | 82 23 | 115 0  | 146 7  | 175 15 |
| 26 | 23 13 | 51 54 | 83 28 | 116 5  | 147 7  | 176 12 |
| 27 | 24 8  | 52 55 | 84 33 | 117 9  | 148 7  | 177 9  |
| 28 | 25 3  | 53 55 | 85 38 | 118 13 | 149 6  | 178 6  |
| 29 | 25 58 | 54 56 | 86 43 | 119 17 | 150 6  | 179 3  |
| 30 | 26 53 | 55 57 | 87 49 | 120 21 | 151 5  | 180 0  |



Ad Lictu Linen .s. Gra Linum.

| B  | B      | B      | B      | B      | B      | B      | B |
|----|--------|--------|--------|--------|--------|--------|---|
| 0  | 1      | 2      | 3      | 4      | 5      | 6      | 7 |
| 0  | 180 0  | 208 55 | 239 39 | 272 11 | 304 3  | 333 7  |   |
| 1  | 180 57 | 209 54 | 240 43 | 273 17 | 305 4  | 334 2  |   |
| 2  | 181 54 | 210 54 | 241 47 | 274 22 | 306 5  | 334 57 |   |
| 3  | 182 51 | 211 53 | 242 51 | 275 27 | 307 5  | 335 52 |   |
| 4  | 183 48 | 212 53 | 243 55 | 276 32 | 308 6  | 336 47 |   |
| 5  | 184 45 | 213 53 | 245 0  | 277 37 | 309 6  | 337 42 |   |
| 6  | 185 42 | 214 53 | 246 4  | 278 42 | 310 6  | 338 37 |   |
| 7  | 186 39 | 215 53 | 247 9  | 279 47 | 311 5  | 339 31 |   |
| 8  | 187 37 | 216 54 | 248 13 | 280 52 | 312 5  | 340 26 |   |
| 9  | 188 34 | 217 54 | 249 18 | 281 57 | 313 4  | 341 20 |   |
| 10 | 189 32 | 218 55 | 250 23 | 283 1  | 314 3  | 342 14 |   |
| 11 | 190 29 | 219 55 | 251 28 | 284 6  | 315 2  | 343 8  |   |
| 12 | 191 26 | 220 56 | 252 33 | 285 10 | 316 1  | 344 2  |   |
| 13 | 192 24 | 221 57 | 253 38 | 286 15 | 317 0  | 344 56 |   |
| 14 | 193 21 | 222 58 | 254 43 | 287 19 | 317 59 | 345 50 |   |
| 15 | 194 19 | 223 59 | 255 48 | 288 23 | 318 57 | 346 43 |   |
| 16 | 195 16 | 225 1  | 256 54 | 289 27 | 319 55 | 347 37 |   |
| 17 | 195 14 | 226 3  | 257 59 | 290 31 | 320 53 | 348 30 |   |
| 18 | 197 12 | 227 5  | 259 4  | 291 34 | 321 50 | 349 24 |   |
| 19 | 198 10 | 228 7  | 260 9  | 292 38 | 322 48 | 350 17 |   |
| 20 | 199 8  | 229 9  | 261 15 | 293 41 | 323 45 | 351 10 |   |
| 21 | 200 6  | 230 11 | 262 20 | 294 44 | 324 42 | 352 3  |   |
| 22 | 201 4  | 231 14 | 263 26 | 295 47 | 325 39 | 352 56 |   |
| 23 | 202 3  | 232 16 | 264 31 | 296 49 | 326 36 | 353 49 |   |
| 24 | 203 1  | 233 19 | 265 37 | 297 52 | 327 33 | 354 42 |   |
| 25 | 204 0  | 234 22 | 266 43 | 298 54 | 328 29 | 355 35 |   |
| 26 | 204 59 | 235 25 | 267 48 | 299 56 | 329 25 | 356 28 |   |
| 27 | 205 58 | 256 28 | 268 54 | 300 58 | 330 21 | 357 21 |   |
| 28 | 206 56 | 237 32 | 269 59 | 302 0  | 331 16 | 358 15 |   |
| 29 | 207 57 | 238 35 | 271 5  | 303 2  | 332 12 | 359 7  |   |
| 30 | 208 55 | 239 39 | 272 11 | 304 3  | 333 7  | 360 0  |   |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 26 40 | 55 35 | 87 23  | 119 59 | 150 52 |
| 1  | 0 52  | 27 35 | 56 36 | 88 29  | 121 3  | 151 52 |
| 2  | 1 44  | 28 30 | 57 38 | 89 35  | 122 7  | 152 51 |
| 3  | 2 37  | 29 26 | 58 39 | 90 40  | 123 10 | 153 51 |
| 4  | 3 29  | 30 21 | 59 41 | 91 46  | 124 14 | 154 50 |
| 5  | 4 22  | 31 17 | 60 43 | 92 51  | 125 17 | 155 49 |
| 6  | 5 14  | 32 13 | 61 45 | 93 57  | 126 20 | 156 48 |
| 7  | 6 7   | 33 9  | 62 47 | 95 3   | 127 23 | 157 47 |
| 8  | 7 0   | 34 6  | 63 50 | 96 8   | 128 26 | 158 46 |
| 9  | 7 53  | 35 2  | 64 52 | 97 14  | 129 29 | 159 45 |
| 10 | 8 46  | 35 59 | 65 55 | 98 19  | 130 31 | 160 43 |
| 11 | 9 39  | 36 56 | 66 58 | 99 25  | 131 34 | 161 42 |
| 12 | 10 32 | 37 53 | 68 1  | 100 30 | 132 36 | 162 40 |
| 13 | 11 25 | 38 50 | 69 5  | 101 36 | 133 39 | 163 39 |
| 14 | 12 18 | 39 47 | 70 8  | 102 41 | 134 41 | 164 37 |
| 15 | 13 11 | 40 45 | 71 12 | 103 46 | 135 43 | 165 35 |
| 16 | 14 4  | 41 43 | 72 16 | 104 52 | 136 45 | 166 33 |
| 17 | 14 57 | 42 41 | 73 20 | 105 57 | 137 46 | 167 31 |
| 18 | 15 57 | 43 40 | 74 24 | 107 3  | 138 47 | 168 29 |
| 19 | 16 43 | 44 38 | 75 28 | 108 8  | 139 48 | 169 27 |
| 20 | 17 37 | 45 37 | 76 33 | 109 13 | 140 49 | 170 24 |
| 21 | 18 31 | 46 36 | 77 37 | 110 18 | 141 50 | 171 22 |
| 22 | 19 25 | 47 35 | 78 42 | 111 23 | 142 50 | 172 20 |
| 23 | 20 19 | 48 34 | 79 47 | 112 28 | 143 51 | 173 17 |
| 24 | 21 13 | 49 33 | 80 52 | 113 33 | 144 51 | 174 15 |
| 25 | 22 7  | 50 33 | 81 57 | 114 37 | 145 51 | 175 12 |
| 26 | 23 1  | 51 33 | 83 2  | 115 42 | 146 52 | 176 10 |
| 27 | 23 56 | 52 33 | 84 7  | 116 46 | 147 52 | 177 8  |
| 28 | 24 50 | 53 34 | 85 12 | 117 51 | 148 52 | 178 5  |
| 29 | 25 45 | 54 34 | 86 17 | 118 55 | 149 52 | 179 3  |
| 30 | 26 40 | 55 35 | 87 23 | 119 59 | 150 52 | 180 0  |



Ad latitudinem .6. Graduum

|    | ♌      | ♍      | ♎      | ♏      | ♐      | ♑      | ♒   |
|----|--------|--------|--------|--------|--------|--------|-----|
| h  | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 209 8  | 240 1  | 272 37 | 304 25 | 333 20 |     |
| 1  | 180 57 | 210 8  | 241 5  | 273 43 | 305 26 | 334 15 |     |
| 2  | 181 55 | 211 8  | 242 9  | 274 48 | 306 26 | 335 10 |     |
| 3  | 182 52 | 212 8  | 243 14 | 275 53 | 307 27 | 336 4  |     |
| 4  | 183 50 | 213 8  | 244 18 | 276 58 | 308 27 | 336 59 |     |
| 5  | 184 48 | 214 9  | 245 23 | 278 3  | 309 27 | 337 53 |     |
| 6  | 185 45 | 215 9  | 246 27 | 279 8  | 310 27 | 338 47 |     |
| 7  | 186 43 | 216 9  | 247 32 | 280 13 | 311 26 | 339 41 |     |
| 8  | 187 40 | 217 10 | 248 37 | 281 18 | 312 25 | 340 35 |     |
| 9  | 188 38 | 218 10 | 249 42 | 282 23 | 313 24 | 341 29 |     |
| 10 | 189 36 | 219 11 | 250 47 | 283 27 | 314 23 | 342 23 |     |
| 11 | 190 33 | 220 12 | 251 52 | 284 32 | 315 22 | 343 17 |     |
| 12 | 191 31 | 221 13 | 252 57 | 285 36 | 316 20 | 344 10 |     |
| 13 | 192 29 | 222 14 | 254 3  | 286 40 | 317 19 | 345 3  |     |
| 14 | 193 27 | 223 15 | 255 8  | 287 44 | 318 17 | 345 56 |     |
| 15 | 194 25 | 224 17 | 256 14 | 288 48 | 319 15 | 346 49 |     |
| 16 | 195 23 | 225 19 | 257 19 | 289 52 | 320 13 | 347 42 |     |
| 17 | 196 21 | 226 21 | 258 24 | 290 55 | 321 10 | 348 35 |     |
| 18 | 197 20 | 227 24 | 259 30 | 291 59 | 322 7  | 349 28 |     |
| 19 | 198 18 | 228 26 | 260 35 | 293 2  | 323 4  | 350 21 |     |
| 20 | 199 17 | 229 29 | 261 41 | 294 5  | 324 1  | 351 14 |     |
| 21 | 200 15 | 230 31 | 262 46 | 295 8  | 324 58 | 352 7  |     |
| 22 | 201 14 | 231 34 | 263 52 | 296 10 | 325 54 | 353 0  |     |
| 23 | 202 13 | 232 37 | 264 57 | 297 13 | 326 51 | 353 53 |     |
| 24 | 203 12 | 233 40 | 266 3  | 298 15 | 327 47 | 354 46 |     |
| 25 | 204 11 | 234 43 | 267 9  | 299 17 | 328 43 | 355 38 |     |
| 26 | 205 10 | 235 46 | 268 14 | 300 19 | 329 39 | 356 31 |     |
| 27 | 206 9  | 236 50 | 269 20 | 301 21 | 330 34 | 357 23 |     |
| 28 | 207 9  | 237 53 | 270 25 | 302 22 | 331 30 | 358 16 |     |
| 29 | 208 8  | 238 57 | 271 31 | 303 24 | 332 25 | 359 8  |     |
| 30 | 209 8  | 240 1  | 272 37 | 304 25 | 333 20 | 360 0  |     |

DEI



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ι     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 26 28 | 55 12 | 86 56  | 119 36 | 150 40 |
| 1  | 0 52  | 27 23 | 56 13 | 88 1   | 120 40 | 151 40 |
| 2  | 1 44  | 28 18 | 57 14 | 89 7   | 121 44 | 152 40 |
| 3  | 2 36  | 29 13 | 58 16 | 90 12  | 122 48 | 153 40 |
| 4  | 3 28  | 30 8  | 59 17 | 91 18  | 123 52 | 154 40 |
| 5  | 4 20  | 31 3  | 60 19 | 92 24  | 124 56 | 155 39 |
| 6  | 5 12  | 31 59 | 61 21 | 93 29  | 126 0  | 156 39 |
| 7  | 6 4   | 32 55 | 62 23 | 94 35  | 127 3  | 157 38 |
| 8  | 6 57  | 33 51 | 63 25 | 95 41  | 128 6  | 158 37 |
| 9  | 7 49  | 34 47 | 64 27 | 96 47  | 129 9  | 159 36 |
| 10 | 8 42  | 35 43 | 65 30 | 97 53  | 130 12 | 160 35 |
| 11 | 9 34  | 36 39 | 66 33 | 98 59  | 131 15 | 161 34 |
| 12 | 10 26 | 37 36 | 67 36 | 100 5  | 132 18 | 162 33 |
| 13 | 11 19 | 38 33 | 68 40 | 101 10 | 133 20 | 163 31 |
| 14 | 12 11 | 39 30 | 69 42 | 102 16 | 134 23 | 164 30 |
| 15 | 13 4  | 40 27 | 70 47 | 103 21 | 135 25 | 165 28 |
| 16 | 13 57 | 41 25 | 71 51 | 104 27 | 136 27 | 166 27 |
| 17 | 14 50 | 42 23 | 72 55 | 105 32 | 137 29 | 167 25 |
| 18 | 15 43 | 43 21 | 73 59 | 106 38 | 138 30 | 168 24 |
| 19 | 16 36 | 44 19 | 75 3  | 107 43 | 139 32 | 169 22 |
| 20 | 17 29 | 45 18 | 76 7  | 108 48 | 140 33 | 170 20 |
| 21 | 18 22 | 46 16 | 77 11 | 109 53 | 141 35 | 171 18 |
| 22 | 19 16 | 47 15 | 78 16 | 110 58 | 142 36 | 172 16 |
| 23 | 20 9  | 48 14 | 79 20 | 112 3  | 143 37 | 173 14 |
| 24 | 21 3  | 49 13 | 80 25 | 113 8  | 144 38 | 174 12 |
| 25 | 21 57 | 50 12 | 81 30 | 114 13 | 145 39 | 175 10 |
| 26 | 22 51 | 51 12 | 82 35 | 115 18 | 146 40 | 176 8  |
| 27 | 23 45 | 52 12 | 83 40 | 116 23 | 147 40 | 177 6  |
| 28 | 24 39 | 53 12 | 84 45 | 117 27 | 148 40 | 178 4  |
| 29 | 25 33 | 54 12 | 85 50 | 118 32 | 149 40 | 179 2  |
| 30 | 26 28 | 55 12 | 86 56 | 119 36 | 150 40 | 180 0  |



Ad latitudinem .7. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎ |
|----|--------|--------|--------|--------|--------|--------|---|
| ♈  | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎ |
| 0  | 180 0  | 209 20 | 240 24 | 273 4  | 304 48 | 333 32 |   |
| 1  | 180 58 | 210 20 | 241 28 | 274 10 | 305 48 | 334 27 |   |
| 2  | 181 56 | 211 20 | 242 33 | 275 15 | 306 48 | 335 21 |   |
| 3  | 182 54 | 212 20 | 243 37 | 276 20 | 307 48 | 336 15 |   |
| 4  | 183 42 | 213 20 | 244 42 | 277 25 | 308 48 | 337 9  |   |
| 5  | 184 50 | 214 21 | 245 47 | 278 30 | 309 48 | 338 3  |   |
| 6  | 185 48 | 215 22 | 246 52 | 279 35 | 310 47 | 338 57 |   |
| 7  | 186 46 | 216 23 | 247 57 | 280 40 | 311 46 | 339 51 |   |
| 8  | 187 44 | 217 24 | 249 2  | 281 44 | 312 45 | 340 44 |   |
| 9  | 188 42 | 218 25 | 250 7  | 282 49 | 313 44 | 341 38 |   |
| 10 | 189 40 | 219 27 | 251 12 | 283 53 | 314 42 | 342 31 |   |
| 11 | 190 38 | 220 28 | 252 17 | 284 57 | 315 41 | 343 24 |   |
| 12 | 191 36 | 221 30 | 253 22 | 286 1  | 316 39 | 344 17 |   |
| 13 | 192 35 | 222 31 | 254 28 | 287 5  | 317 37 | 345 10 |   |
| 14 | 193 33 | 223 33 | 255 33 | 288 9  | 318 35 | 346 3  |   |
| 15 | 194 32 | 224 35 | 256 39 | 289 13 | 319 33 | 346 56 |   |
| 16 | 195 30 | 225 37 | 257 44 | 290 17 | 320 30 | 347 49 |   |
| 17 | 196 29 | 226 40 | 258 50 | 291 20 | 321 27 | 348 41 |   |
| 18 | 197 27 | 227 42 | 259 55 | 292 24 | 322 24 | 349 34 |   |
| 19 | 198 26 | 228 45 | 261 1  | 293 27 | 323 21 | 350 26 |   |
| 20 | 199 25 | 229 48 | 262 7  | 294 30 | 324 17 | 351 18 |   |
| 21 | 200 24 | 230 51 | 263 13 | 295 33 | 325 13 | 342 11 |   |
| 22 | 201 23 | 231 54 | 264 19 | 296 35 | 326 9  | 353 3  |   |
| 23 | 202 22 | 232 57 | 265 25 | 297 37 | 327 5  | 353 56 |   |
| 24 | 203 21 | 234 0  | 266 31 | 298 39 | 328 1  | 354 48 |   |
| 25 | 204 21 | 235 4  | 267 36 | 299 41 | 328 57 | 355 40 |   |
| 26 | 205 20 | 236 8  | 268 42 | 300 43 | 329 52 | 356 32 |   |
| 27 | 206 20 | 237 12 | 269 48 | 301 44 | 330 47 | 357 24 |   |
| 28 | 207 20 | 238 16 | 270 53 | 302 46 | 331 42 | 358 16 |   |
| 29 | 208 20 | 239 20 | 271 59 | 303 47 | 332 37 | 359 8  |   |
| 30 | 209 20 | 240 4  | 273 24 | 304 48 | 333 32 | 360 0  |   |



Tabula Ascensionum Obliquarum.

| ♈  | ♉     | ♊     | ♋     | ♌      | ♍      | ♎      |
|----|-------|-------|-------|--------|--------|--------|
| ♈  | ♉     | ♊     | ♋     | ♌      | ♍      | ♎      |
| 0  | 0 0   | 26 16 | 54 50 | 86 30  | 119 14 | 150 28 |
| 1  | 0 51  | 27 10 | 55 51 | 87 35  | 120 19 | 151 28 |
| 2  | 1 43  | 28 4  | 56 52 | 88 41  | 121 23 | 152 28 |
| 3  | 2 34  | 28 59 | 57 53 | 89 46  | 122 27 | 153 28 |
| 4  | 3 26  | 29 53 | 58 54 | 90 52  | 123 31 | 154 28 |
| 5  | 4 18  | 30 48 | 59 56 | 91 58  | 124 35 | 155 28 |
| 6  | 5 9   | 31 43 | 60 58 | 93 3   | 125 39 | 156 28 |
| 7  | 6 1   | 32 39 | 62 0  | 94 9   | 126 42 | 157 28 |
| 8  | 6 53  | 33 35 | 63 2  | 95 15  | 127 46 | 158 27 |
| 9  | 7 45  | 34 31 | 64 4  | 96 21  | 128 49 | 159 27 |
| 10 | 8 37  | 35 27 | 65 6  | 97 27  | 129 52 | 160 26 |
| 11 | 9 29  | 36 23 | 66 9  | 98 33  | 130 55 | 161 26 |
| 12 | 10 21 | 37 19 | 67 12 | 99 39  | 131 58 | 162 25 |
| 13 | 11 13 | 38 16 | 68 15 | 100 44 | 133 1  | 163 24 |
| 14 | 12 5  | 39 12 | 69 18 | 101 50 | 134 4  | 164 23 |
| 15 | 12 58 | 40 9  | 70 21 | 102 55 | 135 7  | 165 22 |
| 16 | 13 50 | 41 6  | 71 25 | 104 1  | 136 9  | 166 21 |
| 17 | 14 42 | 42 4  | 72 29 | 105 7  | 137 11 | 167 20 |
| 18 | 15 25 | 43 2  | 73 33 | 106 13 | 138 13 | 168 18 |
| 19 | 16 27 | 44 0  | 74 37 | 107 19 | 139 15 | 169 17 |
| 20 | 17 20 | 44 58 | 75 41 | 108 24 | 140 17 | 170 15 |
| 21 | 18 13 | 45 56 | 76 45 | 109 30 | 141 19 | 171 14 |
| 22 | 19 6  | 46 55 | 77 50 | 110 35 | 142 20 | 172 13 |
| 23 | 19 59 | 47 53 | 78 54 | 111 40 | 143 22 | 173 11 |
| 24 | 20 52 | 48 52 | 79 59 | 112 45 | 144 23 | 174 10 |
| 25 | 21 46 | 49 51 | 81 4  | 113 50 | 145 24 | 175 8  |
| 26 | 22 40 | 50 50 | 82 9  | 114 55 | 146 25 | 176 7  |
| 27 | 23 34 | 51 50 | 83 14 | 116 0  | 147 26 | 177 5  |
| 28 | 24 28 | 52 50 | 84 19 | 117 5  | 148 27 | 178 4  |
| 29 | 25 22 | 53 50 | 85 24 | 118 10 | 149 28 | 179 2  |
| 30 | 26 16 | 54 50 | 86 30 | 119 14 | 150 28 | 180 0  |



Ad latitudinem .8. Graduum

| i  | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎   |
|----|--------|--------|--------|--------|--------|--------|-----|
| h  | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 209 32 | 240 46 | 273 30 | 305 10 | 333 44 |     |
| 1  | 180 58 | 210 32 | 241 50 | 274 36 | 306 10 | 334 38 |     |
| 2  | 181 56 | 211 33 | 242 55 | 275 41 | 307 10 | 335 32 |     |
| 3  | 182 55 | 212 34 | 244 0  | 276 46 | 308 10 | 336 26 |     |
| 4  | 183 53 | 213 35 | 245 5  | 277 51 | 309 10 | 337 20 |     |
| 5  | 184 52 | 214 36 | 246 10 | 278 56 | 310 9  | 338 14 |     |
| 6  | 185 50 | 215 37 | 247 15 | 280 1  | 311 8  | 339 8  |     |
| 7  | 186 49 | 216 38 | 248 20 | 281 6  | 312 7  | 340 1  |     |
| 8  | 187 47 | 217 40 | 249 25 | 282 10 | 313 5  | 340 54 |     |
| 9  | 188 46 | 218 41 | 250 30 | 283 15 | 314 4  | 341 47 |     |
| 10 | 189 45 | 219 43 | 251 36 | 284 19 | 315 2  | 342 40 |     |
| 11 | 190 43 | 220 45 | 252 41 | 285 23 | 316 0  | 343 33 |     |
| 12 | 191 42 | 221 47 | 253 47 | 286 27 | 316 58 | 344 25 |     |
| 13 | 192 40 | 222 49 | 254 53 | 287 31 | 317 56 | 345 18 |     |
| 14 | 193 39 | 223 51 | 255 59 | 288 35 | 318 54 | 346 10 |     |
| 15 | 194 38 | 224 53 | 257 5  | 289 39 | 319 51 | 347 2  |     |
| 16 | 195 37 | 225 56 | 258 10 | 290 42 | 320 48 | 347 55 |     |
| 17 | 196 36 | 226 59 | 259 16 | 291 45 | 321 44 | 348 47 |     |
| 18 | 197 35 | 228 2  | 260 21 | 292 48 | 322 41 | 349 39 |     |
| 19 | 198 34 | 229 5  | 261 27 | 293 51 | 323 37 | 350 31 |     |
| 20 | 199 34 | 230 8  | 262 33 | 294 54 | 324 33 | 351 23 |     |
| 21 | 200 33 | 231 11 | 263 39 | 295 56 | 325 29 | 352 15 |     |
| 22 | 201 33 | 232 14 | 264 45 | 296 58 | 326 25 | 353 7  |     |
| 23 | 202 32 | 233 18 | 265 51 | 298 0  | 327 21 | 353 59 |     |
| 24 | 203 32 | 234 21 | 266 57 | 299 2  | 328 17 | 354 51 |     |
| 25 | 204 32 | 235 25 | 268 2  | 300 4  | 329 12 | 355 42 |     |
| 26 | 205 32 | 236 29 | 269 8  | 301 6  | 330 7  | 356 34 |     |
| 27 | 206 32 | 237 33 | 270 14 | 302 7  | 331 1  | 357 26 |     |
| 28 | 207 32 | 238 37 | 271 19 | 303 8  | 331 56 | 358 17 |     |
| 29 | 208 32 | 239 41 | 272 25 | 304 9  | 332 50 | 359 9  |     |
| 30 | 209 32 | 240 46 | 273 30 | 305 10 | 333 44 | 360 0  |     |

DE 3



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 26 3  | 54 28 | 86 3   | 118 52 | 150 15 |
| 1  | 0 51  | 26 57 | 55 28 | 87 8   | 119 57 | 151 16 |
| 2  | 1 42  | 27 51 | 56 29 | 88 14  | 121 1  | 152 17 |
| 3  | 2 33  | 28 45 | 57 30 | 89 19  | 122 6  | 153 17 |
| 4  | 3 24  | 29 39 | 58 31 | 90 25  | 123 10 | 154 18 |
| 5  | 4 16  | 30 34 | 59 32 | 91 31  | 124 14 | 155 18 |
| 6  | 5 7   | 31 29 | 60 33 | 92 36  | 125 18 | 156 18 |
| 7  | 5 58  | 32 24 | 61 35 | 93 42  | 126 22 | 157 18 |
| 8  | 6 50  | 33 20 | 62 37 | 94 48  | 127 25 | 158 18 |
| 9  | 7 41  | 34 15 | 63 39 | 95 54  | 128 29 | 159 18 |
| 10 | 8 33  | 35 11 | 64 41 | 97 0   | 129 32 | 160 18 |
| 11 | 9 24  | 36 7  | 65 44 | 98 6   | 130 36 | 161 18 |
| 12 | 10 16 | 37 3  | 66 47 | 99 12  | 131 39 | 162 17 |
| 13 | 11 7  | 37 59 | 67 50 | 100 18 | 132 43 | 163 17 |
| 14 | 11 59 | 38 55 | 68 53 | 101 24 | 133 46 | 164 16 |
| 15 | 12 51 | 39 51 | 69 56 | 102 30 | 134 49 | 165 15 |
| 16 | 13 43 | 40 48 | 70 59 | 103 36 | 135 52 | 166 15 |
| 17 | 14 35 | 41 45 | 72 3  | 104 42 | 136 54 | 167 14 |
| 18 | 15 27 | 42 43 | 73 6  | 105 48 | 137 57 | 168 13 |
| 19 | 16 19 | 43 40 | 74 9  | 106 54 | 138 59 | 169 12 |
| 20 | 17 12 | 44 38 | 75 13 | 107 59 | 140 1  | 170 11 |
| 21 | 18 4  | 45 36 | 76 17 | 109 5  | 141 3  | 171 10 |
| 22 | 18 57 | 46 34 | 77 22 | 110 10 | 142 5  | 172 9  |
| 23 | 19 50 | 47 33 | 78 27 | 111 16 | 143 7  | 173 8  |
| 24 | 20 43 | 48 31 | 79 32 | 112 21 | 144 9  | 174 7  |
| 25 | 21 36 | 49 30 | 80 37 | 113 26 | 145 10 | 175 6  |
| 26 | 22 29 | 50 29 | 81 42 | 114 32 | 146 11 | 176 5  |
| 27 | 23 22 | 51 29 | 82 47 | 115 37 | 147 12 | 177 4  |
| 28 | 24 16 | 52 28 | 83 52 | 116 42 | 148 13 | 178 3  |
| 29 | 25 9  | 53 28 | 84 57 | 117 47 | 149 14 | 179 2  |
| 30 | 26 3  | 54 28 | 86 3  | 118 52 | 150 15 | 180 0  |



Ad latitudinem .9. Graduum

|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| 0  | 180 | 0  | 209 | 45 | 241 | 8  | 273 | 57 | 305 | 32 | 333 | 57 |
| 1  | 180 | 58 | 210 | 46 | 242 | 13 | 275 | 3  | 306 | 32 | 334 | 51 |
| 2  | 181 | 57 | 211 | 47 | 243 | 18 | 276 | 8  | 307 | 32 | 335 | 44 |
| 3  | 182 | 56 | 212 | 48 | 244 | 23 | 277 | 13 | 308 | 31 | 336 | 38 |
| 4  | 183 | 55 | 213 | 49 | 245 | 28 | 278 | 18 | 309 | 31 | 337 | 31 |
| 5  | 184 | 54 | 214 | 50 | 246 | 34 | 279 | 23 | 310 | 30 | 338 | 24 |
| 6  | 185 | 53 | 215 | 51 | 247 | 39 | 280 | 28 | 311 | 29 | 339 | 17 |
| 7  | 186 | 52 | 216 | 53 | 248 | 44 | 281 | 33 | 312 | 27 | 340 | 10 |
| 8  | 187 | 51 | 217 | 55 | 249 | 50 | 282 | 38 | 313 | 26 | 341 | 3  |
| 9  | 188 | 50 | 218 | 57 | 250 | 55 | 283 | 43 | 314 | 24 | 341 | 56 |
| 10 | 189 | 49 | 219 | 59 | 252 | 1  | 284 | 47 | 315 | 22 | 342 | 48 |
| 11 | 190 | 48 | 221 | 1  | 253 | 6  | 285 | 51 | 316 | 20 | 343 | 41 |
| 12 | 191 | 47 | 222 | 3  | 254 | 12 | 286 | 54 | 317 | 17 | 344 | 33 |
| 13 | 192 | 46 | 223 | 6  | 255 | 18 | 287 | 48 | 318 | 15 | 345 | 25 |
| 14 | 193 | 45 | 224 | 8  | 256 | 24 | 289 | 1  | 319 | 12 | 346 | 17 |
| 15 | 194 | 45 | 225 | 11 | 257 | 30 | 290 | 4  | 320 | 9  | 347 | 9  |
| 16 | 195 | 44 | 226 | 14 | 258 | 36 | 291 | 7  | 321 | 5  | 348 | 1  |
| 17 | 196 | 43 | 227 | 17 | 259 | 42 | 292 | 10 | 322 | 1  | 348 | 53 |
| 18 | 197 | 43 | 228 | 21 | 260 | 48 | 293 | 13 | 322 | 57 | 349 | 44 |
| 19 | 198 | 42 | 229 | 24 | 261 | 54 | 294 | 16 | 323 | 53 | 350 | 36 |
| 20 | 199 | 42 | 230 | 28 | 263 | 0  | 295 | 19 | 324 | 49 | 351 | 27 |
| 21 | 200 | 42 | 231 | 31 | 264 | 6  | 296 | 21 | 325 | 45 | 352 | 19 |
| 22 | 201 | 42 | 232 | 35 | 265 | 12 | 297 | 23 | 326 | 40 | 353 | 10 |
| 23 | 202 | 42 | 233 | 38 | 266 | 18 | 298 | 25 | 327 | 36 | 354 | 2  |
| 24 | 203 | 42 | 234 | 42 | 267 | 24 | 299 | 27 | 328 | 31 | 354 | 53 |
| 25 | 204 | 42 | 235 | 46 | 268 | 29 | 300 | 28 | 329 | 26 | 355 | 44 |
| 26 | 205 | 42 | 236 | 50 | 269 | 35 | 301 | 29 | 330 | 21 | 356 | 36 |
| 27 | 206 | 43 | 237 | 54 | 270 | 41 | 302 | 30 | 331 | 15 | 357 | 27 |
| 28 | 207 | 43 | 238 | 59 | 271 | 46 | 303 | 31 | 332 | 9  | 358 | 18 |
| 29 | 208 | 44 | 240 | 3  | 272 | 52 | 304 | 32 | 333 | 3  | 359 | 9  |
| 30 | 209 | 45 | 241 | 8  | 273 | 57 | 305 | 32 | 333 | 57 | 360 | 0  |

DE 4



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | θ     |
|----|-------|-------|-------|--------|--------|-------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m   |
| 0  | 0 0   | 25 51 | 54 5  | 85 36  | 118 29 | 150 3 |
| 1  | 0 50  | 26 44 | 55 5  | 86 42  | 119 34 | 151 4 |
| 2  | 1 41  | 27 38 | 56 6  | 87 47  | 120 39 | 152 5 |
| 3  | 2 32  | 28 32 | 57 6  | 88 53  | 121 43 | 153 6 |
| 4  | 3 23  | 29 26 | 58 7  | 89 58  | 122 48 | 154 7 |
| 5  | 4 14  | 30 20 | 59 8  | 91 4   | 123 52 | 155 7 |
| 6  | 5 5   | 31 14 | 60 9  | 92 10  | 124 56 | 156 8 |
| 7  | 5 56  | 32 9  | 61 11 | 93 16  | 126 0  | 157 8 |
| 8  | 6 47  | 33 4  | 62 12 | 94 22  | 127 4  | 158 9 |
| 9  | 7 38  | 33 59 | 63 14 | 95 28  | 128 8  | 159 9 |
| 10 | 8 29  | 34 54 | 64 16 | 96 34  | 129 12 | 160 9 |
| 11 | 9 20  | 35 49 | 65 18 | 97 40  | 130 16 | 161 9 |
| 12 | 10 11 | 36 45 | 66 21 | 98 46  | 131 20 | 162 9 |
| 13 | 11 2  | 37 41 | 67 23 | 99 51  | 132 24 | 163 9 |
| 14 | 11 53 | 38 37 | 68 26 | 100 57 | 133 28 | 164 9 |
| 15 | 12 45 | 39 33 | 69 29 | 102 3  | 134 31 | 165 9 |
| 16 | 13 36 | 40 30 | 70 32 | 103 10 | 135 34 | 166 9 |
| 17 | 14 28 | 41 27 | 71 36 | 104 16 | 136 37 | 167 9 |
| 18 | 15 19 | 42 24 | 72 40 | 105 22 | 137 40 | 168 8 |
| 19 | 16 11 | 43 21 | 73 44 | 106 28 | 138 43 | 169 8 |
| 20 | 17 3  | 44 18 | 74 48 | 107 34 | 139 45 | 170 7 |
| 21 | 17 55 | 45 16 | 75 52 | 108 40 | 140 48 | 171 7 |
| 22 | 18 47 | 46 14 | 76 56 | 109 46 | 141 50 | 172 6 |
| 23 | 19 40 | 47 12 | 78 1  | 110 51 | 142 52 | 173 6 |
| 24 | 20 32 | 48 10 | 79 5  | 111 57 | 143 54 | 174 5 |
| 25 | 21 25 | 49 4  | 80 10 | 113 2  | 144 56 | 175 4 |
| 26 | 22 18 | 50 7  | 81 15 | 114 8  | 145 58 | 176 4 |
| 27 | 23 11 | 51 6  | 82 20 | 115 13 | 146 59 | 177 3 |
| 28 | 24 4  | 52 6  | 83 25 | 116 19 | 148 1  | 178 2 |
| 29 | 24 57 | 53 5  | 84 30 | 117 24 | 149 2  | 179 1 |
| 30 | 25 51 | 54 5  | 85 36 | 118 29 | 150 3  | 180 0 |



Ad latitudinem .10. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 209 57 | 241 31 | 274 24 | 305 55 | 334 9  |
| 1  | 180 59 | 210 58 | 242 36 | 275 30 | 306 55 | 335 3  |
| 2  | 181 58 | 211 59 | 243 41 | 276 35 | 307 54 | 335 56 |
| 3  | 182 57 | 213 1  | 244 47 | 277 40 | 308 54 | 336 49 |
| 4  | 183 56 | 214 2  | 245 52 | 278 45 | 309 53 | 337 42 |
| 5  | 184 56 | 215 4  | 246 58 | 279 50 | 310 52 | 338 35 |
| 6  | 185 55 | 216 6  | 248 3  | 280 55 | 311 50 | 339 28 |
| 7  | 186 54 | 217 8  | 249 9  | 281 59 | 312 48 | 340 20 |
| 8  | 187 54 | 218 10 | 250 14 | 283 4  | 313 46 | 341 13 |
| 9  | 188 53 | 219 12 | 251 20 | 284 8  | 314 44 | 342 5  |
| 10 | 189 53 | 220 15 | 252 26 | 285 12 | 315 42 | 342 57 |
| 11 | 190 52 | 221 17 | 253 32 | 286 16 | 316 39 | 343 49 |
| 12 | 191 52 | 222 20 | 254 38 | 287 20 | 317 36 | 344 41 |
| 13 | 192 51 | 223 23 | 255 44 | 288 24 | 318 33 | 345 32 |
| 14 | 193 51 | 224 26 | 256 50 | 289 28 | 319 30 | 346 24 |
| 15 | 194 51 | 225 29 | 257 57 | 290 31 | 320 27 | 347 15 |
| 16 | 195 51 | 226 32 | 259 3  | 291 34 | 321 23 | 348 7  |
| 17 | 196 51 | 227 36 | 260 9  | 292 37 | 322 19 | 348 58 |
| 18 | 197 51 | 228 40 | 261 14 | 293 39 | 323 15 | 349 49 |
| 19 | 198 51 | 229 44 | 262 20 | 294 42 | 324 10 | 350 40 |
| 20 | 199 51 | 230 48 | 263 26 | 295 44 | 325 6  | 351 31 |
| 21 | 200 51 | 231 52 | 264 32 | 296 46 | 326 1  | 352 22 |
| 22 | 201 51 | 232 56 | 265 38 | 297 48 | 326 56 | 353 13 |
| 23 | 202 52 | 234 0  | 266 44 | 298 49 | 327 51 | 354 4  |
| 24 | 203 52 | 235 4  | 267 50 | 299 51 | 328 46 | 354 55 |
| 25 | 204 53 | 236 8  | 268 56 | 300 52 | 329 40 | 355 46 |
| 26 | 205 53 | 237 12 | 270 2  | 301 53 | 330 34 | 356 37 |
| 27 | 206 54 | 238 17 | 271 7  | 302 54 | 331 28 | 357 28 |
| 28 | 207 55 | 239 21 | 272 13 | 303 54 | 332 22 | 358 19 |
| 29 | 208 56 | 240 26 | 273 18 | 304 55 | 333 16 | 359 10 |
| 30 | 209 57 | 241 31 | 274 24 | 305 55 | 334 9  | 360 0  |



Tabula Ascensionum Obliquarum.

|    | ♈     | ♉     | ♊     | ♋      | ♌      | ♍      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 25 38 | 53 42 | 85 9   | 118 6  | 149 50 |
| 1  | 0 50  | 26 31 | 54 42 | 86 14  | 119 11 | 150 52 |
| 2  | 1 40  | 27 24 | 55 42 | 87 20  | 120 16 | 151 53 |
| 3  | 2 31  | 28 18 | 56 43 | 88 25  | 121 21 | 152 55 |
| 4  | 3 21  | 29 11 | 57 43 | 89 31  | 122 26 | 153 56 |
| 5  | 4 12  | 30 5  | 58 44 | 90 37  | 123 31 | 154 57 |
| 6  | 5 2   | 30 59 | 59 45 | 91 43  | 124 36 | 155 58 |
| 7  | 5 53  | 31 54 | 60 46 | 92 49  | 125 40 | 156 59 |
| 8  | 6 43  | 32 48 | 61 48 | 93 55  | 126 45 | 158 0  |
| 9  | 7 34  | 33 43 | 62 49 | 95 1   | 127 49 | 159 1  |
| 10 | 8 25  | 34 38 | 63 51 | 96 7   | 128 53 | 160 1  |
| 11 | 9 15  | 35 33 | 64 53 | 97 13  | 129 57 | 161 2  |
| 12 | 10 6  | 36 28 | 65 56 | 98 19  | 131 1  | 162 2  |
| 13 | 10 57 | 37 24 | 66 58 | 99 25  | 132 5  | 163 3  |
| 14 | 11 48 | 38 19 | 68 1  | 100 31 | 133 9  | 164 3  |
| 15 | 12 39 | 39 15 | 69 4  | 101 38 | 134 13 | 165 3  |
| 16 | 13 30 | 40 11 | 70 7  | 102 45 | 135 16 | 166 3  |
| 17 | 14 21 | 41 8  | 71 10 | 103 51 | 136 19 | 167 3  |
| 18 | 15 12 | 42 5  | 72 14 | 104 57 | 137 22 | 168 3  |
| 19 | 16 3  | 43 2  | 73 17 | 106 3  | 138 25 | 169 3  |
| 20 | 16 55 | 43 59 | 74 21 | 107 9  | 139 28 | 170 3  |
| 21 | 17 47 | 44 56 | 75 25 | 108 15 | 140 31 | 171 3  |
| 22 | 18 39 | 45 54 | 76 29 | 109 21 | 141 34 | 172 3  |
| 23 | 19 31 | 46 51 | 77 34 | 110 27 | 142 36 | 173 3  |
| 24 | 20 23 | 47 49 | 78 38 | 111 33 | 143 39 | 174 3  |
| 25 | 21 15 | 48 47 | 79 43 | 112 38 | 144 41 | 175 2  |
| 26 | 22 7  | 49 46 | 80 48 | 113 44 | 145 43 | 176 2  |
| 27 | 23 0  | 50 45 | 81 53 | 114 50 | 146 45 | 177 2  |
| 28 | 23 52 | 51 44 | 82 58 | 115 55 | 147 47 | 178 1  |
| 29 | 24 47 | 52 43 | 84 3  | 117 1  | 148 49 | 179 1  |
| 30 | 25 38 | 53 42 | 85 9  | 118 6  | 149 50 | 180 0  |



Ad latitudinem .11. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 210 10 | 241 54 | 274 51 | 306 18 | 334 22 |
| 1  | 180 59 | 211 11 | 242 59 | 275 57 | 307 17 | 335 15 |
| 2  | 181 59 | 212 13 | 244 5  | 277 2  | 308 16 | 336 8  |
| 3  | 182 58 | 213 15 | 245 10 | 278 7  | 309 15 | 337 0  |
| 4  | 183 58 | 214 17 | 246 16 | 279 12 | 310 14 | 337 53 |
| 5  | 184 58 | 215 19 | 247 22 | 280 17 | 311 13 | 338 45 |
| 6  | 185 57 | 216 21 | 248 27 | 281 22 | 312 11 | 339 37 |
| 7  | 186 57 | 217 24 | 249 33 | 282 26 | 313 9  | 340 29 |
| 8  | 187 57 | 218 26 | 250 39 | 283 31 | 314 6  | 341 21 |
| 9  | 188 57 | 219 29 | 251 45 | 284 35 | 315 4  | 342 13 |
| 10 | 189 57 | 220 32 | 252 51 | 285 39 | 316 1  | 343 5  |
| 11 | 190 57 | 221 35 | 253 57 | 286 43 | 316 58 | 343 57 |
| 12 | 191 57 | 222 38 | 255 3  | 287 46 | 317 55 | 344 48 |
| 13 | 192 57 | 223 41 | 256 9  | 288 50 | 318 52 | 345 39 |
| 14 | 193 57 | 224 44 | 257 15 | 289 53 | 319 49 | 346 30 |
| 15 | 194 57 | 225 47 | 258 22 | 290 56 | 320 45 | 347 21 |
| 16 | 195 57 | 226 51 | 259 29 | 291 59 | 321 41 | 348 12 |
| 17 | 196 57 | 227 55 | 260 35 | 293 2  | 322 36 | 349 3  |
| 18 | 197 58 | 228 59 | 261 41 | 294 4  | 323 32 | 349 54 |
| 19 | 198 58 | 230 3  | 262 47 | 295 7  | 324 27 | 350 45 |
| 20 | 199 59 | 231 7  | 263 53 | 296 9  | 325 22 | 351 35 |
| 21 | 200 59 | 232 11 | 264 59 | 297 11 | 326 17 | 352 26 |
| 22 | 202 0  | 233 15 | 266 5  | 298 12 | 327 12 | 353 17 |
| 23 | 203 1  | 234 20 | 267 11 | 299 14 | 328 6  | 354 7  |
| 24 | 204 2  | 235 24 | 268 17 | 300 15 | 329 1  | 354 58 |
| 25 | 205 3  | 236 29 | 269 23 | 301 16 | 329 55 | 355 48 |
| 26 | 206 4  | 237 34 | 270 29 | 302 17 | 330 49 | 356 39 |
| 27 | 207 5  | 238 39 | 271 35 | 303 17 | 331 42 | 357 29 |
| 28 | 208 7  | 239 44 | 272 40 | 304 18 | 332 36 | 358 20 |
| 29 | 209 8  | 240 49 | 273 46 | 305 18 | 333 29 | 359 10 |
| 30 | 210 10 | 241 54 | 274 51 | 306 18 | 334 22 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 25 25 | 53 19 | 84 42  | 117 43 | 149 37 |
| 1  | 0 50  | 26 18 | 54 19 | 85 47  | 118 49 | 150 39 |
| 2  | 1 40  | 27 11 | 55 19 | 86 53  | 119 54 | 151 41 |
| 3  | 2 30  | 28 4  | 56 19 | 87 58  | 120 59 | 152 43 |
| 4  | 3 20  | 28 57 | 57 19 | 89 4   | 122 4  | 153 45 |
| 5  | 4 10  | 29 50 | 58 19 | 90 10  | 123 9  | 154 46 |
| 6  | 5 0   | 30 44 | 59 20 | 91 16  | 124 14 | 155 48 |
| 7  | 5 50  | 31 38 | 60 21 | 92 22  | 125 19 | 156 49 |
| 8  | 6 40  | 32 32 | 61 22 | 93 28  | 126 23 | 157 50 |
| 9  | 7 30  | 33 26 | 62 23 | 94 34  | 127 28 | 158 51 |
| 10 | 8 20  | 34 21 | 63 25 | 95 41  | 128 32 | 159 52 |
| 11 | 9 10  | 35 16 | 64 27 | 96 47  | 129 37 | 160 53 |
| 12 | 10 0  | 36 11 | 65 30 | 97 53  | 130 41 | 161 54 |
| 13 | 10 51 | 37 6  | 66 32 | 99 0   | 131 46 | 162 55 |
| 14 | 11 41 | 38 1  | 67 35 | 100 6  | 132 50 | 163 56 |
| 15 | 12 32 | 38 56 | 68 38 | 101 12 | 133 54 | 164 56 |
| 16 | 13 22 | 39 52 | 69 41 | 102 19 | 134 58 | 165 57 |
| 17 | 14 13 | 40 48 | 70 44 | 103 25 | 136 1  | 166 57 |
| 18 | 15 4  | 41 45 | 71 48 | 104 31 | 137 5  | 167 58 |
| 19 | 15 55 | 42 41 | 72 51 | 105 37 | 138 8  | 168 58 |
| 20 | 16 46 | 43 38 | 73 55 | 106 43 | 139 11 | 169 58 |
| 21 | 17 37 | 44 35 | 74 59 | 107 49 | 140 14 | 170 59 |
| 22 | 18 29 | 45 32 | 76 3  | 108 55 | 141 17 | 171 59 |
| 23 | 19 20 | 46 30 | 77 7  | 110 1  | 142 20 | 173 0  |
| 24 | 20 12 | 47 27 | 78 11 | 111 7  | 143 23 | 174 0  |
| 25 | 21 4  | 48 25 | 79 16 | 112 13 | 144 26 | 175 0  |
| 26 | 21 56 | 49 23 | 80 21 | 113 19 | 145 29 | 176 0  |
| 27 | 22 48 | 50 22 | 81 26 | 114 25 | 146 30 | 177 0  |
| 28 | 23 40 | 51 21 | 82 31 | 115 31 | 147 33 | 178 0  |
| 29 | 24 32 | 52 20 | 83 36 | 116 37 | 148 35 | 179 0  |
| 30 | 25 25 | 53 19 | 84 42 | 117 43 | 149 37 | 180 0  |



Ad latitudinem .12. Graduum.

|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| 0  | 180 | 0  | 210 | 23 | 242 | 17 | 275 | 18 | 306 | 41 | 334 | 35 |
| 1  | 181 | 0  | 211 | 25 | 243 | 23 | 276 | 24 | 307 | 40 | 335 | 28 |
| 2  | 182 | 0  | 212 | 27 | 244 | 29 | 277 | 29 | 308 | 39 | 336 | 20 |
| 3  | 183 | 0  | 213 | 29 | 245 | 35 | 278 | 34 | 309 | 38 | 337 | 12 |
| 4  | 184 | 0  | 214 | 31 | 246 | 41 | 279 | 39 | 310 | 37 | 338 | 4  |
| 5  | 185 | 0  | 215 | 34 | 247 | 47 | 280 | 44 | 311 | 35 | 338 | 56 |
| 6  | 186 | 0  | 216 | 37 | 248 | 53 | 281 | 49 | 312 | 33 | 339 | 48 |
| 7  | 187 | 0  | 217 | 40 | 249 | 59 | 282 | 53 | 313 | 30 | 340 | 40 |
| 8  | 188 | 1  | 218 | 43 | 251 | 5  | 283 | 57 | 314 | 28 | 341 | 31 |
| 9  | 189 | 1  | 219 | 46 | 252 | 11 | 285 | 1  | 315 | 25 | 342 | 23 |
| 10 | 190 | 2  | 220 | 49 | 253 | 17 | 286 | 5  | 316 | 22 | 343 | 14 |
| 11 | 191 | 2  | 221 | 52 | 254 | 23 | 287 | 9  | 317 | 19 | 344 | 5  |
| 12 | 192 | 2  | 222 | 55 | 255 | 29 | 288 | 12 | 318 | 15 | 344 | 56 |
| 13 | 193 | 3  | 223 | 59 | 256 | 35 | 289 | 16 | 319 | 12 | 345 | 47 |
| 14 | 194 | 3  | 225 | 2  | 257 | 41 | 290 | 19 | 320 | 8  | 346 | 38 |
| 15 | 195 | 4  | 226 | 6  | 258 | 48 | 291 | 22 | 321 | 4  | 347 | 28 |
| 16 | 196 | 4  | 227 | 10 | 259 | 54 | 292 | 25 | 321 | 59 | 348 | 19 |
| 17 | 197 | 5  | 228 | 14 | 261 | 0  | 293 | 28 | 322 | 54 | 349 | 9  |
| 18 | 198 | 6  | 229 | 19 | 262 | 7  | 294 | 30 | 323 | 49 | 350 | 0  |
| 19 | 199 | 7  | 230 | 23 | 263 | 13 | 295 | 33 | 324 | 44 | 350 | 50 |
| 20 | 200 | 8  | 231 | 28 | 264 | 19 | 296 | 35 | 325 | 39 | 351 | 40 |
| 21 | 201 | 9  | 232 | 32 | 265 | 26 | 297 | 37 | 326 | 34 | 352 | 30 |
| 22 | 202 | 10 | 233 | 37 | 266 | 32 | 298 | 38 | 327 | 28 | 353 | 20 |
| 23 | 203 | 11 | 234 | 41 | 267 | 38 | 299 | 39 | 328 | 22 | 354 | 10 |
| 24 | 204 | 12 | 235 | 46 | 268 | 44 | 300 | 40 | 329 | 16 | 355 | 0  |
| 25 | 205 | 14 | 236 | 51 | 269 | 50 | 301 | 41 | 330 | 10 | 355 | 50 |
| 26 | 206 | 15 | 237 | 56 | 270 | 56 | 302 | 41 | 331 | 3  | 356 | 40 |
| 27 | 207 | 17 | 239 | 1  | 272 | 2  | 303 | 41 | 331 | 56 | 357 | 30 |
| 28 | 208 | 19 | 240 | 6  | 273 | 7  | 304 | 41 | 332 | 49 | 358 | 20 |
| 29 | 209 | 21 | 241 | 5  | 274 | 13 | 305 | 41 | 333 | 42 | 359 | 10 |
| 30 | 210 | 23 | 242 | 17 | 275 | 18 | 306 | 41 | 334 | 35 | 360 | 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 25 12 | 52 55 | 84 14  | 117 19 | 149 24 |
| 1  | 0 49  | 26 4  | 53 55 | 85 19  | 118 25 | 150 27 |
| 2  | 1 38  | 26 57 | 54 55 | 86 25  | 119 31 | 151 29 |
| 3  | 2 28  | 27 49 | 55 55 | 87 31  | 120 36 | 152 31 |
| 4  | 3 17  | 28 42 | 56 55 | 88 37  | 121 42 | 153 33 |
| 5  | 4 7   | 29 35 | 57 55 | 89 43  | 122 47 | 154 35 |
| 6  | 4 56  | 30 28 | 58 56 | 90 49  | 123 52 | 155 37 |
| 7  | 5 46  | 31 22 | 59 57 | 91 55  | 124 57 | 156 39 |
| 8  | 6 36  | 32 16 | 60 58 | 93 1   | 126 2  | 157 41 |
| 9  | 7 26  | 33 10 | 61 59 | 94 7   | 127 7  | 158 43 |
| 10 | 8 16  | 34 4  | 63 0  | 95 14  | 128 12 | 159 44 |
| 11 | 9 6   | 34 58 | 64 2  | 96 20  | 129 17 | 160 46 |
| 12 | 9 56  | 35 53 | 65 4  | 97 26  | 130 22 | 161 47 |
| 13 | 10 46 | 36 48 | 66 6  | 98 32  | 131 27 | 162 48 |
| 14 | 11 36 | 37 43 | 67 8  | 99 39  | 132 32 | 163 49 |
| 15 | 12 26 | 38 38 | 68 11 | 100 45 | 133 36 | 164 50 |
| 16 | 13 16 | 39 34 | 69 14 | 101 51 | 134 40 | 165 51 |
| 17 | 14 6  | 40 30 | 70 17 | 102 58 | 135 44 | 166 52 |
| 18 | 14 57 | 41 26 | 71 21 | 104 5  | 136 47 | 167 53 |
| 19 | 15 47 | 42 22 | 72 24 | 105 12 | 137 51 | 168 54 |
| 20 | 16 38 | 43 18 | 73 28 | 106 18 | 138 54 | 169 54 |
| 21 | 17 29 | 44 15 | 74 32 | 107 25 | 139 58 | 170 55 |
| 22 | 18 20 | 45 12 | 75 36 | 108 31 | 141 1  | 171 56 |
| 23 | 19 11 | 46 9  | 76 40 | 109 37 | 142 5  | 172 56 |
| 24 | 20 2  | 47 6  | 77 44 | 110 43 | 143 8  | 173 57 |
| 25 | 20 53 | 48 3  | 78 49 | 111 49 | 144 11 | 174 57 |
| 26 | 21 44 | 49 1  | 79 54 | 112 55 | 145 14 | 175 58 |
| 27 | 22 36 | 49 59 | 80 59 | 114 1  | 146 17 | 176 59 |
| 28 | 23 28 | 50 58 | 82 4  | 115 7  | 147 19 | 177 59 |
| 29 | 24 20 | 51 56 | 83 9  | 116 13 | 148 22 | 179 0  |
| 30 | 25 12 | 52 55 | 84 14 | 117 19 | 149 24 | 180 0  |



Ad latitudinem .13. Graduum.

|    | ♌   |    | ♍   |    | ♎   |    | ♏   |    | ♐   |    | ♑   |    | ♒ |   | ♓ |   |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|---|---|---|---|
|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h | m | h | m |
| 0  | 180 | 0  | 210 | 36 | 242 | 41 | 275 | 46 | 307 | 5  | 334 | 48 |   |   |   |   |
| 1  | 181 | 0  | 211 | 38 | 243 | 47 | 276 | 51 | 308 | 4  | 335 | 40 |   |   |   |   |
| 2  | 182 | 1  | 212 | 41 | 244 | 53 | 277 | 56 | 309 | 2  | 336 | 32 |   |   |   |   |
| 3  | 183 | 1  | 213 | 43 | 245 | 59 | 279 | 1  | 310 | 1  | 337 | 24 |   |   |   |   |
| 4  | 184 | 2  | 214 | 46 | 247 | 5  | 280 | 6  | 310 | 59 | 338 | 16 |   |   |   |   |
| 5  | 185 | 3  | 215 | 49 | 248 | 11 | 281 | 11 | 311 | 57 | 339 | 7  |   |   |   |   |
| 6  | 186 | 3  | 216 | 52 | 249 | 17 | 282 | 16 | 312 | 54 | 339 | 58 |   |   |   |   |
| 7  | 187 | 4  | 217 | 55 | 250 | 23 | 283 | 20 | 313 | 51 | 340 | 49 |   |   |   |   |
| 8  | 188 | 4  | 218 | 59 | 251 | 29 | 284 | 24 | 314 | 48 | 341 | 40 |   |   |   |   |
| 9  | 189 | 5  | 220 | 2  | 252 | 35 | 285 | 28 | 315 | 45 | 342 | 31 |   |   |   |   |
| 10 | 190 | 6  | 221 | 6  | 253 | 42 | 286 | 32 | 316 | 42 | 343 | 22 |   |   |   |   |
| 11 | 191 | 6  | 222 | 9  | 254 | 48 | 287 | 36 | 317 | 38 | 344 | 13 |   |   |   |   |
| 12 | 192 | 7  | 223 | 13 | 255 | 55 | 288 | 39 | 318 | 34 | 345 | 3  |   |   |   |   |
| 13 | 193 | 8  | 224 | 16 | 257 | 2  | 289 | 43 | 319 | 30 | 345 | 54 |   |   |   |   |
| 14 | 194 | 9  | 225 | 20 | 258 | 9  | 290 | 46 | 320 | 26 | 346 | 44 |   |   |   |   |
| 15 | 195 | 10 | 226 | 24 | 259 | 15 | 291 | 49 | 321 | 22 | 347 | 34 |   |   |   |   |
| 16 | 196 | 11 | 227 | 28 | 260 | 21 | 292 | 52 | 322 | 17 | 348 | 24 |   |   |   |   |
| 17 | 197 | 12 | 228 | 33 | 261 | 28 | 293 | 54 | 323 | 12 | 349 | 14 |   |   |   |   |
| 18 | 198 | 13 | 229 | 38 | 262 | 34 | 294 | 56 | 324 | 7  | 250 | 4  |   |   |   |   |
| 19 | 199 | 14 | 230 | 43 | 263 | 40 | 295 | 58 | 325 | 2  | 250 | 54 |   |   |   |   |
| 20 | 200 | 16 | 231 | 48 | 264 | 46 | 297 | 0  | 325 | 56 | 351 | 44 |   |   |   |   |
| 21 | 201 | 17 | 232 | 53 | 265 | 53 | 298 | 1  | 326 | 50 | 352 | 34 |   |   |   |   |
| 22 | 202 | 19 | 233 | 58 | 266 | 59 | 299 | 2  | 327 | 44 | 353 | 24 |   |   |   |   |
| 23 | 203 | 21 | 235 | 3  | 268 | 5  | 300 | 3  | 328 | 38 | 354 | 14 |   |   |   |   |
| 24 | 204 | 23 | 236 | 8  | 269 | 11 | 301 | 4  | 329 | 32 | 355 | 4  |   |   |   |   |
| 25 | 205 | 25 | 237 | 13 | 270 | 17 | 302 | 5  | 330 | 25 | 355 | 53 |   |   |   |   |
| 26 | 206 | 27 | 238 | 18 | 271 | 23 | 303 | 5  | 331 | 18 | 356 | 43 |   |   |   |   |
| 27 | 207 | 29 | 239 | 24 | 272 | 29 | 304 | 5  | 332 | 11 | 357 | 32 |   |   |   |   |
| 28 | 208 | 31 | 240 | 29 | 273 | 35 | 305 | 5  | 333 | 3  | 358 | 22 |   |   |   |   |
| 29 | 209 | 33 | 241 | 35 | 274 | 41 | 306 | 5  | 333 | 56 | 359 | 11 |   |   |   |   |
| 30 | 210 | 36 | 242 | 41 | 275 | 46 | 307 | 5  | 334 | 48 | 360 | 0  |   |   |   |   |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | Ω      | mp     |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 24 59 | 52 32 | 83 46  | 116 56 | 149 11 |
| 1  | 0 49  | 25 51 | 53 31 | 84 51  | 118 2  | 150 14 |
| 2  | 1 38  | 26 43 | 54 30 | 85 57  | 119 8  | 151 17 |
| 3  | 2 27  | 27 35 | 55 30 | 87 3   | 120 14 | 152 19 |
| 4  | 3 16  | 28 27 | 56 30 | 88 9   | 121 20 | 153 22 |
| 5  | 4 5   | 29 20 | 57 30 | 89 15  | 122 25 | 154 24 |
| 6  | 4 54  | 30 13 | 58 30 | 90 21  | 123 31 | 155 27 |
| 7  | 5 43  | 31 7  | 59 31 | 91 27  | 124 36 | 156 29 |
| 8  | 6 33  | 32 0  | 60 32 | 92 33  | 125 42 | 157 31 |
| 9  | 7 32  | 32 54 | 61 33 | 93 39  | 126 47 | 158 33 |
| 10 | 8 12  | 33 48 | 62 34 | 94 46  | 127 52 | 159 35 |
| 11 | 9 1   | 34 42 | 63 36 | 95 52  | 128 57 | 160 37 |
| 12 | 9 50  | 35 36 | 64 38 | 96 59  | 130 2  | 161 39 |
| 13 | 10 40 | 36 30 | 65 40 | 98 5   | 131 7  | 162 40 |
| 14 | 11 29 | 37 24 | 66 42 | 99 12  | 132 12 | 163 42 |
| 15 | 12 19 | 38 19 | 67 45 | 100 19 | 133 17 | 164 43 |
| 16 | 13 9  | 39 14 | 68 48 | 101 26 | 134 22 | 165 45 |
| 17 | 13 59 | 40 10 | 69 51 | 102 33 | 135 26 | 166 46 |
| 18 | 14 49 | 41 6  | 70 54 | 103 39 | 136 30 | 167 48 |
| 19 | 15 39 | 42 2  | 71 57 | 104 46 | 137 34 | 168 49 |
| 20 | 16 29 | 42 58 | 73 0  | 105 52 | 138 38 | 169 50 |
| 21 | 17 19 | 43 54 | 74 4  | 106 59 | 139 42 | 170 51 |
| 22 | 18 10 | 44 50 | 75 6  | 108 5  | 140 46 | 171 52 |
| 23 | 19 0  | 45 47 | 76 12 | 109 12 | 141 49 | 172 53 |
| 24 | 19 51 | 46 44 | 77 16 | 110 18 | 142 53 | 173 54 |
| 25 | 20 42 | 47 41 | 78 21 | 111 24 | 143 56 | 174 55 |
| 26 | 21 33 | 48 39 | 79 26 | 112 31 | 144 59 | 175 56 |
| 27 | 22 24 | 49 37 | 80 31 | 113 37 | 146 2  | 176 57 |
| 28 | 23 16 | 50 35 | 81 36 | 114 44 | 147 5  | 177 58 |
| 29 | 24 7  | 51 43 | 82 41 | 115 50 | 148 8  | 178 59 |
| 30 | 24 59 | 52 32 | 83 46 | 116 56 | 149 11 | 180 0  |



# Ad latitudinem .14. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎   |
|----|--------|--------|--------|--------|--------|--------|-----|
|    | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 210 49 | 243 4  | 276 14 | 307 28 | 335 1  |     |
| 1  | 181 1  | 211 52 | 244 10 | 277 19 | 308 27 | 335 53 |     |
| 2  | 182 2  | 212 55 | 245 16 | 278 24 | 309 25 | 336 44 |     |
| 3  | 183 3  | 213 58 | 246 23 | 279 29 | 310 23 | 337 36 |     |
| 4  | 184 4  | 215 1  | 247 29 | 280 34 | 311 21 | 338 27 |     |
| 5  | 185 5  | 216 4  | 248 36 | 281 39 | 312 19 | 339 18 |     |
| 6  | 186 6  | 217 7  | 249 42 | 282 44 | 313 16 | 340 9  |     |
| 7  | 187 7  | 218 11 | 250 48 | 283 48 | 314 13 | 341 0  |     |
| 8  | 188 8  | 219 14 | 251 55 | 284 52 | 315 10 | 341 50 |     |
| 9  | 189 9  | 220 18 | 253 1  | 285 56 | 316 6  | 342 41 |     |
| 10 | 190 10 | 221 22 | 254 8  | 287 0  | 317 2  | 343 31 |     |
| 11 | 191 11 | 222 26 | 255 14 | 288 3  | 317 58 | 344 21 |     |
| 12 | 192 12 | 223 30 | 256 21 | 289 6  | 318 54 | 345 11 |     |
| 13 | 193 14 | 224 34 | 257 27 | 290 9  | 319 50 | 346 1  |     |
| 14 | 194 15 | 225 38 | 258 34 | 291 12 | 320 46 | 346 51 |     |
| 15 | 195 17 | 226 43 | 259 41 | 292 15 | 321 41 | 347 41 |     |
| 16 | 196 18 | 227 48 | 260 48 | 293 18 | 322 36 | 348 31 |     |
| 17 | 197 20 | 228 53 | 261 55 | 294 20 | 323 30 | 349 20 |     |
| 18 | 198 21 | 229 58 | 263 1  | 295 22 | 324 24 | 350 10 |     |
| 19 | 199 23 | 231 3  | 264 8  | 296 24 | 325 18 | 350 59 |     |
| 20 | 200 25 | 232 8  | 265 14 | 297 26 | 326 12 | 351 48 |     |
| 21 | 201 27 | 233 13 | 266 21 | 298 27 | 327 6  | 352 38 |     |
| 22 | 202 29 | 234 18 | 267 27 | 299 28 | 328 0  | 353 27 |     |
| 23 | 203 31 | 235 24 | 268 33 | 300 29 | 328 53 | 354 17 |     |
| 24 | 204 33 | 236 29 | 269 39 | 301 30 | 329 47 | 355 6  |     |
| 25 | 205 36 | 237 35 | 270 45 | 302 30 | 330 40 | 355 55 |     |
| 26 | 206 38 | 238 40 | 271 51 | 303 30 | 331 33 | 356 44 |     |
| 27 | 207 41 | 239 46 | 272 57 | 304 30 | 332 25 | 357 33 |     |
| 28 | 208 43 | 240 52 | 274 3  | 305 30 | 333 17 | 358 22 |     |
| 29 | 209 46 | 241 58 | 275 9  | 306 29 | 334 9  | 359 11 |     |
| 30 | 210 49 | 243 4  | 276 14 | 307 28 | 335 1  | 360 0  |     |

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# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ♋      | ♌      | ♍      |
|----|-------|-------|-------|--------|--------|--------|
| ♈  | ♈ m   | ♈ m   | ♈ m   | ♈ m    | ♈ m    | ♈ m    |
| 0  | 0 0   | 24 46 | 52 9  | 83 19  | 116 33 | 148 58 |
| 1  | 0 48  | 25 37 | 53 8  | 84 25  | 117 39 | 150 1  |
| 2  | 1 37  | 26 29 | 54 7  | 85 31  | 118 45 | 151 4  |
| 3  | 2 25  | 27 21 | 55 6  | 86 36  | 119 51 | 152 7  |
| 4  | 3 14  | 28 13 | 56 5  | 87 42  | 120 57 | 153 10 |
| 5  | 4 3   | 29 5  | 57 5  | 88 47  | 122 3  | 154 13 |
| 6  | 4 51  | 29 58 | 58 5  | 89 54  | 123 9  | 155 16 |
| 7  | 5 40  | 30 51 | 59 6  | 91 0   | 124 15 | 156 19 |
| 8  | 6 29  | 31 44 | 60 6  | 92 7   | 125 20 | 157 21 |
| 9  | 7 18  | 32 37 | 61 7  | 93 13  | 126 26 | 158 24 |
| 10 | 8 7   | 33 31 | 62 8  | 94 19  | 127 31 | 159 26 |
| 11 | 8 56  | 34 24 | 63 10 | 95 26  | 128 37 | 160 28 |
| 12 | 9 45  | 35 18 | 64 12 | 96 33  | 129 42 | 161 30 |
| 13 | 10 34 | 36 12 | 65 14 | 97 39  | 130 48 | 162 32 |
| 14 | 11 23 | 37 6  | 66 16 | 98 46  | 131 53 | 163 34 |
| 15 | 12 12 | 38 0  | 67 18 | 99 52  | 132 58 | 164 36 |
| 16 | 13 1  | 38 55 | 68 21 | 100 59 | 134 3  | 165 38 |
| 17 | 13 51 | 39 50 | 69 24 | 102 6  | 135 8  | 166 40 |
| 18 | 14 40 | 40 46 | 70 27 | 103 13 | 136 12 | 167 42 |
| 19 | 15 30 | 41 41 | 71 30 | 104 20 | 137 17 | 168 44 |
| 20 | 16 20 | 42 37 | 72 33 | 105 26 | 138 21 | 169 45 |
| 21 | 17 10 | 43 33 | 73 37 | 106 33 | 139 25 | 170 47 |
| 22 | 18 0  | 44 29 | 74 41 | 107 40 | 140 29 | 171 49 |
| 23 | 18 50 | 45 26 | 75 45 | 108 46 | 141 33 | 172 50 |
| 24 | 19 40 | 46 22 | 76 49 | 109 53 | 142 37 | 173 52 |
| 25 | 20 31 | 47 19 | 77 53 | 110 59 | 143 41 | 174 53 |
| 26 | 21 22 | 48 17 | 78 58 | 112 6  | 144 45 | 175 55 |
| 27 | 22 13 | 49 15 | 80 3  | 113 13 | 145 48 | 176 56 |
| 28 | 23 4  | 50 13 | 81 8  | 114 20 | 146 52 | 177 58 |
| 29 | 23 55 | 51 11 | 82 13 | 115 27 | 147 55 | 178 59 |
| 30 | 24 6  | 52 9  | 83 19 | 116 33 | 148 58 | 180 0  |



Ad latitudinem .15. Graduum

|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| 0  | 180 | 0  | 211 | 2  | 243 | 27 | 276 | 41 | 307 | 51 | 335 | 14 |
| 1  | 181 | 1  | 212 | 5  | 244 | 33 | 277 | 47 | 308 | 49 | 336 | 5  |
| 2  | 182 | 2  | 213 | 8  | 245 | 40 | 278 | 52 | 309 | 47 | 336 | 56 |
| 3  | 183 | 4  | 214 | 12 | 246 | 47 | 279 | 57 | 310 | 45 | 337 | 47 |
| 4  | 184 | 5  | 215 | 15 | 247 | 54 | 281 | 2  | 311 | 43 | 338 | 38 |
| 5  | 185 | 7  | 216 | 19 | 249 | 1  | 282 | 7  | 312 | 41 | 339 | 29 |
| 6  | 186 | 8  | 217 | 23 | 250 | 7  | 283 | 11 | 313 | 38 | 340 | 20 |
| 7  | 187 | 10 | 218 | 27 | 251 | 14 | 284 | 15 | 314 | 34 | 341 | 10 |
| 8  | 188 | 11 | 219 | 31 | 252 | 20 | 285 | 19 | 315 | 31 | 342 | 0  |
| 9  | 189 | 13 | 220 | 35 | 253 | 27 | 286 | 23 | 316 | 27 | 342 | 50 |
| 10 | 190 | 15 | 221 | 39 | 254 | 34 | 287 | 27 | 317 | 23 | 343 | 40 |
| 11 | 191 | 16 | 222 | 43 | 255 | 40 | 288 | 30 | 318 | 19 | 344 | 30 |
| 12 | 192 | 18 | 223 | 48 | 256 | 47 | 289 | 33 | 319 | 14 | 345 | 20 |
| 13 | 193 | 20 | 224 | 52 | 257 | 54 | 290 | 36 | 320 | 10 | 346 | 9  |
| 14 | 194 | 22 | 225 | 57 | 259 | 1  | 291 | 39 | 321 | 5  | 346 | 59 |
| 15 | 195 | 24 | 227 | 2  | 260 | 8  | 292 | 42 | 322 | 0  | 347 | 48 |
| 16 | 196 | 26 | 228 | 7  | 261 | 14 | 293 | 44 | 322 | 54 | 348 | 37 |
| 17 | 197 | 28 | 229 | 12 | 262 | 21 | 294 | 46 | 323 | 48 | 349 | 26 |
| 18 | 198 | 30 | 230 | 18 | 263 | 27 | 295 | 48 | 324 | 42 | 350 | 15 |
| 19 | 199 | 32 | 231 | 23 | 264 | 34 | 296 | 50 | 325 | 36 | 351 | 4  |
| 20 | 200 | 34 | 232 | 29 | 265 | 41 | 297 | 52 | 326 | 29 | 351 | 53 |
| 21 | 201 | 36 | 233 | 34 | 266 | 47 | 298 | 53 | 327 | 23 | 352 | 42 |
| 22 | 202 | 39 | 234 | 40 | 267 | 53 | 299 | 54 | 328 | 16 | 353 | 31 |
| 23 | 203 | 41 | 235 | 45 | 269 | 0  | 300 | 54 | 329 | 9  | 354 | 20 |
| 24 | 204 | 44 | 236 | 51 | 270 | 6  | 301 | 55 | 330 | 2  | 355 | 9  |
| 25 | 205 | 47 | 237 | 57 | 271 | 13 | 302 | 55 | 330 | 55 | 355 | 57 |
| 26 | 206 | 50 | 239 | 3  | 272 | 18 | 303 | 55 | 331 | 47 | 356 | 46 |
| 27 | 207 | 53 | 240 | 9  | 273 | 24 | 304 | 54 | 332 | 39 | 357 | 37 |
| 28 | 208 | 56 | 241 | 15 | 274 | 29 | 305 | 53 | 333 | 31 | 358 | 23 |
| 29 | 209 | 59 | 242 | 21 | 275 | 35 | 306 | 52 | 334 | 23 | 359 | 12 |
| 30 | 211 | 2  | 243 | 27 | 276 | 41 | 307 | 51 | 335 | 14 | 360 | 0  |

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# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | Ω      | np     | i |
|----|-------|-------|-------|--------|--------|--------|---|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |   |
| 0  | 0 0   | 24 33 | 51 45 | 82 50  | 116 9  | 148 45 |   |
| 1  | 0 48  | 25 24 | 52 44 | 83 55  | 117 16 | 149 49 |   |
| 2  | 1 36  | 26 15 | 53 43 | 85 1   | 118 22 | 150 52 |   |
| 3  | 2 24  | 27 7  | 54 42 | 86 7   | 119 29 | 151 56 |   |
| 4  | 3 12  | 27 58 | 55 41 | 87 13  | 120 35 | 152 59 |   |
| 5  | 4 1   | 28 50 | 56 40 | 88 19  | 121 41 | 154 2  |   |
| 6  | 4 49  | 29 42 | 57 40 | 89 25  | 122 47 | 155 5  |   |
| 7  | 5 37  | 30 34 | 58 40 | 90 31  | 123 53 | 156 8  |   |
| 8  | 6 26  | 31 27 | 59 40 | 91 36  | 124 59 | 157 11 |   |
| 9  | 7 14  | 32 20 | 60 41 | 92 44  | 126 5  | 158 14 |   |
| 10 | 8 3   | 33 13 | 61 42 | 93 51  | 127 10 | 159 17 |   |
| 11 | 8 51  | 34 6  | 62 43 | 94 57  | 128 16 | 160 20 |   |
| 12 | 9 40  | 34 59 | 63 45 | 96 4   | 129 22 | 161 23 |   |
| 13 | 10 28 | 35 53 | 64 47 | 97 11  | 130 28 | 162 25 |   |
| 14 | 11 17 | 36 47 | 65 49 | 98 18  | 131 34 | 163 28 |   |
| 15 | 12 6  | 37 41 | 66 51 | 99 25  | 132 39 | 164 30 |   |
| 16 | 12 55 | 38 36 | 67 53 | 100 32 | 133 44 | 165 33 |   |
| 17 | 13 44 | 39 31 | 68 56 | 101 39 | 134 49 | 166 35 |   |
| 18 | 14 33 | 40 26 | 69 59 | 102 46 | 135 54 | 167 37 |   |
| 19 | 15 22 | 41 21 | 71 2  | 103 53 | 136 59 | 168 39 |   |
| 20 | 16 11 | 42 16 | 72 5  | 105 0  | 138 3  | 169 41 |   |
| 21 | 17 0  | 43 12 | 73 9  | 106 7  | 139 8  | 170 43 |   |
| 22 | 17 50 | 44 8  | 74 13 | 107 14 | 140 13 | 171 45 |   |
| 23 | 18 40 | 45 4  | 75 17 | 108 21 | 141 17 | 172 47 |   |
| 24 | 19 30 | 46 0  | 76 21 | 109 38 | 142 22 | 173 49 |   |
| 25 | 20 20 | 46 57 | 77 25 | 110 34 | 143 26 | 174 51 |   |
| 26 | 21 10 | 47 54 | 78 30 | 111 41 | 144 30 | 175 53 |   |
| 27 | 22 1  | 48 51 | 79 35 | 112 48 | 145 34 | 176 55 |   |
| 28 | 22 51 | 49 49 | 80 40 | 113 55 | 146 38 | 177 57 |   |
| 29 | 23 42 | 50 47 | 81 45 | 115 2  | 147 42 | 178 59 |   |
| 30 | 24 33 | 51 45 | 82 50 | 116 9  | 148 45 | 180 0  |   |



Ad latitudinem .16. Graduum

|    | α      | μ      | τ      | θ      | ζ      | χ      |
|----|--------|--------|--------|--------|--------|--------|
| δ  | δ m    | δ m    | δ m    | δ m    | δ m    | δ m    |
| 0  | 180 0  | 211 15 | 243 51 | 277 10 | 308 15 | 335 27 |
| 1  | 181 1  | 212 18 | 244 58 | 278 15 | 309 13 | 336 18 |
| 2  | 182 3  | 213 22 | 246 5  | 279 20 | 310 11 | 337 9  |
| 3  | 183 5  | 214 26 | 247 12 | 280 25 | 311 9  | 337 59 |
| 4  | 184 7  | 215 30 | 248 19 | 281 30 | 312 6  | 338 50 |
| 5  | 185 9  | 216 34 | 249 26 | 282 35 | 313 3  | 339 40 |
| 6  | 186 11 | 217 38 | 250 32 | 283 39 | 314 0  | 340 30 |
| 7  | 187 13 | 218 43 | 251 39 | 284 43 | 314 56 | 341 20 |
| 8  | 188 15 | 219 47 | 252 46 | 285 47 | 315 52 | 342 10 |
| 9  | 189 17 | 220 52 | 253 53 | 286 51 | 316 48 | 343 0  |
| 10 | 190 19 | 221 57 | 255 0  | 287 55 | 317 44 | 343 49 |
| 11 | 191 21 | 223 1  | 256 7  | 288 58 | 318 39 | 344 38 |
| 12 | 192 23 | 224 6  | 257 14 | 290 1  | 319 34 | 345 27 |
| 13 | 193 25 | 225 11 | 258 21 | 291 4  | 320 29 | 346 16 |
| 14 | 194 27 | 226 16 | 259 28 | 292 7  | 321 24 | 347 5  |
| 15 | 195 30 | 227 21 | 260 35 | 293 9  | 322 19 | 347 54 |
| 16 | 196 32 | 228 26 | 261 42 | 294 11 | 323 13 | 348 43 |
| 17 | 197 35 | 229 32 | 262 49 | 295 13 | 324 7  | 349 32 |
| 18 | 198 37 | 230 38 | 263 56 | 296 15 | 325 1  | 350 20 |
| 19 | 199 40 | 231 44 | 265 3  | 297 17 | 325 54 | 351 9  |
| 20 | 200 43 | 232 50 | 266 9  | 298 18 | 326 47 | 351 57 |
| 21 | 201 46 | 233 55 | 267 16 | 299 19 | 327 40 | 352 46 |
| 22 | 202 49 | 235 1  | 268 22 | 300 20 | 328 33 | 353 34 |
| 23 | 203 52 | 236 7  | 269 29 | 301 20 | 329 26 | 354 23 |
| 24 | 204 55 | 237 13 | 270 35 | 302 20 | 330 18 | 355 11 |
| 25 | 205 58 | 238 19 | 271 41 | 303 20 | 331 10 | 355 59 |
| 26 | 207 1  | 239 25 | 272 47 | 304 19 | 332 2  | 356 48 |
| 27 | 208 4  | 240 31 | 273 53 | 305 18 | 332 53 | 357 36 |
| 28 | 209 8  | 241 38 | 274 59 | 306 17 | 333 45 | 358 24 |
| 29 | 210 11 | 242 44 | 276 5  | 307 16 | 334 36 | 359 12 |
| 30 | 211 15 | 243 51 | 277 10 | 308 15 | 335 27 | 360 0  |

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Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | Ω      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 24 20 | 51 28 | 82 22  | 115 44 | 148 32 |
| 1  | 0 47  | 25 11 | 52 18 | 83 27  | 116 51 | 149 36 |
| 2  | 1 35  | 26 2  | 53 17 | 84 33  | 117 58 | 150 40 |
| 3  | 2 22  | 26 53 | 54 16 | 85 39  | 119 5  | 151 44 |
| 4  | 3 10  | 27 44 | 55 15 | 86 45  | 120 12 | 152 48 |
| 5  | 3 58  | 28 35 | 56 15 | 87 51  | 121 18 | 153 51 |
| 6  | 4 46  | 29 27 | 57 15 | 88 57  | 122 25 | 154 55 |
| 7  | 5 34  | 30 19 | 58 15 | 90 3   | 123 31 | 155 58 |
| 8  | 6 22  | 31 11 | 59 15 | 91 10  | 124 37 | 157 2  |
| 9  | 7 10  | 32 3  | 60 15 | 92 16  | 125 43 | 158 5  |
| 10 | 7 58  | 32 56 | 61 15 | 93 23  | 126 49 | 159 8  |
| 11 | 8 46  | 33 49 | 62 16 | 94 29  | 127 56 | 160 11 |
| 12 | 9 34  | 34 42 | 63 17 | 95 36  | 129 2  | 161 14 |
| 13 | 10 22 | 35 35 | 64 19 | 96 43  | 130 8  | 162 17 |
| 14 | 11 10 | 36 28 | 65 21 | 97 50  | 131 14 | 163 20 |
| 15 | 11 59 | 37 22 | 66 23 | 98 57  | 132 20 | 164 23 |
| 16 | 12 47 | 38 16 | 67 25 | 100 4  | 133 26 | 165 26 |
| 17 | 13 36 | 39 10 | 68 28 | 101 11 | 134 31 | 166 29 |
| 18 | 14 24 | 40 5  | 69 31 | 102 18 | 135 36 | 167 31 |
| 19 | 15 13 | 41 0  | 70 34 | 103 25 | 136 41 | 168 34 |
| 20 | 16 2  | 41 55 | 71 37 | 104 33 | 137 46 | 169 36 |
| 21 | 16 51 | 42 50 | 72 41 | 105 41 | 138 51 | 170 39 |
| 22 | 17 40 | 43 46 | 73 45 | 106 48 | 139 56 | 171 41 |
| 23 | 18 30 | 44 42 | 74 49 | 107 55 | 141 1  | 172 44 |
| 24 | 19 19 | 45 38 | 75 53 | 109 2  | 142 6  | 173 46 |
| 25 | 20 9  | 46 34 | 76 57 | 110 9  | 143 11 | 174 48 |
| 26 | 20 59 | 47 31 | 78 2  | 111 16 | 144 16 | 175 51 |
| 27 | 21 49 | 48 28 | 79 7  | 112 23 | 145 20 | 176 53 |
| 28 | 22 29 | 49 25 | 80 12 | 113 30 | 146 24 | 177 56 |
| 29 | 23 39 | 50 22 | 81 17 | 114 37 | 147 28 | 178 58 |
| 30 | 24 20 | 51 20 | 82 22 | 115 44 | 148 32 | 180 0  |



Ad latitudinem .17. Graduum

|    | p   |    | m   |    | T   |    | x   |    | z   |    | X   |    |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
|    | S   | m  | S   | m  | S   | m  | S   | m  | S   | m  | S   | m  |
| 0  | 180 | 0  | 211 | 28 | 244 | 16 | 277 | 38 | 308 | 40 | 335 | 40 |
| 1  | 181 | 2  | 212 | 32 | 245 | 23 | 278 | 43 | 309 | 38 | 336 | 31 |
| 2  | 182 | 4  | 213 | 36 | 246 | 30 | 279 | 48 | 310 | 35 | 337 | 21 |
| 3  | 183 | 7  | 214 | 40 | 247 | 37 | 280 | 53 | 311 | 32 | 338 | 11 |
| 4  | 184 | 9  | 215 | 44 | 248 | 44 | 281 | 58 | 312 | 29 | 339 | 1  |
| 5  | 185 | 12 | 216 | 49 | 249 | 51 | 283 | 3  | 313 | 26 | 339 | 51 |
| 6  | 186 | 14 | 217 | 54 | 250 | 58 | 284 | 7  | 314 | 22 | 340 | 41 |
| 7  | 187 | 16 | 218 | 59 | 252 | 5  | 285 | 11 | 315 | 18 | 341 | 30 |
| 8  | 188 | 19 | 220 | 4  | 253 | 12 | 286 | 15 | 316 | 14 | 342 | 20 |
| 9  | 189 | 21 | 221 | 9  | 254 | 19 | 287 | 19 | 317 | 10 | 343 | 9  |
| 10 | 190 | 24 | 222 | 14 | 255 | 27 | 288 | 23 | 318 | 5  | 343 | 58 |
| 11 | 191 | 26 | 223 | 19 | 256 | 35 | 289 | 26 | 319 | 0  | 344 | 47 |
| 12 | 192 | 29 | 224 | 24 | 257 | 42 | 290 | 29 | 319 | 55 | 345 | 36 |
| 13 | 193 | 31 | 225 | 29 | 258 | 49 | 291 | 32 | 320 | 50 | 346 | 24 |
| 14 | 194 | 34 | 226 | 34 | 259 | 56 | 292 | 35 | 321 | 44 | 347 | 13 |
| 15 | 195 | 37 | 227 | 40 | 261 | 3  | 293 | 37 | 322 | 38 | 348 | 1  |
| 16 | 196 | 40 | 228 | 46 | 262 | 10 | 294 | 39 | 323 | 32 | 348 | 50 |
| 17 | 197 | 43 | 229 | 52 | 263 | 17 | 295 | 41 | 324 | 25 | 349 | 38 |
| 18 | 198 | 46 | 230 | 58 | 264 | 24 | 296 | 43 | 325 | 18 | 350 | 26 |
| 19 | 199 | 49 | 232 | 4  | 265 | 31 | 297 | 44 | 326 | 11 | 351 | 14 |
| 20 | 200 | 52 | 233 | 11 | 266 | 37 | 298 | 45 | 327 | 4  | 352 | 2  |
| 21 | 201 | 55 | 234 | 17 | 267 | 44 | 299 | 45 | 327 | 57 | 352 | 58 |
| 22 | 202 | 58 | 235 | 23 | 268 | 50 | 300 | 45 | 328 | 49 | 353 | 38 |
| 23 | 204 | 2  | 236 | 29 | 269 | 57 | 301 | 45 | 329 | 41 | 354 | 26 |
| 24 | 205 | 5  | 237 | 35 | 271 | 3  | 302 | 45 | 330 | 33 | 355 | 14 |
| 25 | 206 | 9  | 238 | 42 | 272 | 9  | 303 | 45 | 331 | 25 | 356 | 2  |
| 26 | 207 | 12 | 239 | 48 | 273 | 15 | 304 | 45 | 332 | 16 | 356 | 50 |
| 27 | 208 | 16 | 240 | 55 | 274 | 21 | 305 | 44 | 333 | 7  | 357 | 38 |
| 28 | 209 | 20 | 242 | 2  | 275 | 27 | 306 | 43 | 333 | 58 | 358 | 25 |
| 29 | 210 | 24 | 243 | 9  | 276 | 33 | 307 | 42 | 334 | 49 | 359 | 13 |
| 30 | 211 | 28 | 244 | 16 | 277 | 38 | 308 | 40 | 335 | 40 | 360 | 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | ιπ     |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 24 7  | 50 56 | 81 53  | 115 20 | 148 19 |
| 1  | 0 47  | 24 57 | 51 54 | 82 58  | 116 27 | 149 24 |
| 2  | 1 34  | 25 47 | 52 52 | 84 4   | 117 34 | 150 28 |
| 3  | 2 21  | 26 37 | 53 51 | 85 10  | 118 41 | 151 32 |
| 4  | 3 8   | 27 28 | 54 50 | 86 16  | 119 48 | 152 36 |
| 5  | 3 56  | 28 19 | 55 49 | 87 22  | 120 55 | 153 40 |
| 6  | 4 43  | 29 10 | 56 48 | 88 28  | 122 2  | 154 44 |
| 7  | 5 30  | 30 2  | 57 48 | 89 35  | 123 9  | 155 48 |
| 8  | 6 18  | 30 54 | 58 48 | 90 41  | 124 15 | 156 52 |
| 9  | 7 5   | 31 46 | 59 48 | 91 48  | 125 22 | 157 56 |
| 10 | 7 53  | 32 38 | 60 48 | 92 55  | 126 28 | 158 59 |
| 11 | 8 40  | 33 30 | 61 49 | 94 1   | 127 35 | 160 3  |
| 12 | 9 28  | 34 23 | 62 50 | 95 8   | 128 41 | 161 6  |
| 13 | 10 16 | 35 16 | 63 51 | 96 15  | 129 48 | 162 10 |
| 14 | 11 4  | 36 9  | 64 53 | 97 22  | 130 54 | 163 13 |
| 15 | 11 52 | 37 2  | 65 55 | 98 29  | 132 0  | 164 16 |
| 16 | 12 40 | 37 56 | 66 57 | 99 37  | 133 6  | 165 19 |
| 17 | 13 28 | 38 50 | 68 0  | 100 44 | 134 12 | 166 22 |
| 18 | 14 16 | 39 44 | 69 3  | 101 52 | 135 17 | 167 25 |
| 19 | 15 4  | 40 39 | 70 6  | 102 59 | 136 23 | 168 38 |
| 20 | 15 53 | 41 34 | 71 9  | 104 6  | 137 28 | 169 34 |
| 21 | 16 42 | 42 29 | 72 12 | 105 14 | 138 34 | 170 31 |
| 22 | 17 31 | 43 24 | 73 16 | 106 21 | 139 39 | 171 37 |
| 23 | 18 20 | 44 19 | 74 20 | 107 29 | 140 45 | 172 40 |
| 24 | 19 9  | 45 15 | 75 24 | 108 36 | 141 50 | 173 43 |
| 25 | 19 58 | 46 11 | 76 28 | 109 43 | 142 55 | 174 46 |
| 26 | 20 47 | 47 7  | 77 33 | 110 51 | 144 0  | 175 49 |
| 27 | 21 37 | 48 4  | 78 38 | 111 58 | 145 5  | 176 52 |
| 28 | 22 27 | 49 1  | 79 43 | 113 6  | 146 10 | 177 55 |
| 29 | 23 17 | 49 58 | 80 48 | 114 13 | 147 15 | 178 58 |
| 30 | 24 7  | 50 56 | 81 53 | 115 20 | 148 19 | 180 0  |



Ad latitudinem .18. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 211 41 | 244 40 | 278 7  | 309 4  | 335 53 |
| 1  | 181 2  | 212 45 | 245 47 | 279 12 | 310 2  | 336 43 |
| 2  | 182 5  | 213 50 | 246 54 | 280 17 | 310 59 | 337 33 |
| 3  | 183 8  | 214 55 | 248 2  | 281 22 | 311 56 | 338 23 |
| 4  | 184 11 | 216 0  | 249 9  | 282 27 | 312 53 | 339 13 |
| 5  | 185 14 | 217 5  | 250 17 | 283 32 | 313 49 | 340 2  |
| 6  | 186 17 | 218 10 | 251 24 | 284 36 | 314 45 | 340 51 |
| 7  | 187 20 | 219 15 | 252 31 | 285 40 | 315 41 | 341 40 |
| 8  | 188 23 | 220 21 | 253 39 | 286 44 | 316 36 | 342 29 |
| 9  | 189 26 | 221 26 | 254 46 | 287 48 | 317 31 | 343 18 |
| 10 | 190 29 | 222 32 | 255 54 | 288 51 | 318 26 | 344 7  |
| 11 | 191 32 | 223 37 | 257 1  | 289 54 | 319 21 | 344 56 |
| 12 | 192 35 | 224 43 | 258 8  | 290 57 | 320 16 | 345 44 |
| 13 | 193 38 | 225 48 | 259 16 | 292 0  | 321 10 | 346 32 |
| 14 | 194 41 | 226 54 | 260 23 | 293 3  | 322 4  | 347 20 |
| 15 | 195 44 | 228 0  | 261 31 | 294 5  | 322 58 | 348 8  |
| 16 | 196 47 | 229 6  | 262 38 | 295 7  | 323 51 | 348 56 |
| 17 | 197 50 | 230 12 | 263 45 | 296 9  | 324 44 | 349 44 |
| 18 | 198 54 | 231 19 | 264 52 | 297 10 | 325 37 | 350 32 |
| 19 | 199 57 | 232 25 | 265 59 | 298 11 | 326 30 | 351 20 |
| 20 | 201 1  | 233 32 | 267 5  | 299 12 | 327 22 | 352 7  |
| 21 | 202 4  | 234 38 | 268 12 | 300 12 | 328 14 | 352 55 |
| 22 | 203 8  | 235 45 | 269 19 | 301 12 | 329 6  | 353 42 |
| 23 | 204 12 | 236 51 | 270 25 | 302 12 | 329 58 | 354 30 |
| 24 | 205 16 | 237 58 | 271 32 | 303 12 | 330 50 | 355 17 |
| 25 | 206 20 | 239 5  | 272 38 | 304 11 | 331 41 | 356 4  |
| 26 | 207 24 | 240 12 | 273 44 | 305 10 | 332 32 | 356 52 |
| 27 | 208 28 | 241 19 | 274 50 | 306 9  | 333 23 | 357 39 |
| 28 | 209 32 | 242 26 | 275 56 | 307 8  | 334 13 | 358 26 |
| 29 | 210 36 | 243 33 | 277 2  | 308 6  | 335 3  | 359 13 |
| 30 | 211 41 | 244 40 | 278 7  | 309 4  | 335 53 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 23 53 | 50 31 | 81 23  | 114 55 | 148 5  |
| 1  | 0 46  | 24 43 | 51 29 | 82 29  | 116 2  | 149 10 |
| 2  | 1 33  | 25 33 | 52 27 | 83 35  | 117 10 | 150 15 |
| 3  | 2 20  | 26 23 | 53 26 | 84 41  | 118 18 | 151 20 |
| 4  | 3 7   | 27 13 | 54 24 | 85 47  | 119 25 | 152 25 |
| 5  | 3 54  | 28 4  | 55 23 | 86 53  | 120 32 | 153 29 |
| 6  | 4 41  | 28 55 | 56 22 | 87 59  | 121 39 | 154 34 |
| 7  | 5 28  | 29 46 | 57 22 | 89 6   | 122 46 | 155 38 |
| 8  | 6 15  | 30 38 | 58 21 | 90 12  | 123 53 | 156 42 |
| 9  | 7 2   | 31 29 | 59 21 | 91 19  | 125 0  | 157 46 |
| 10 | 7 49  | 32 21 | 60 21 | 92 26  | 126 6  | 158 50 |
| 11 | 8 36  | 33 13 | 61 22 | 93 33  | 127 13 | 159 54 |
| 12 | 9 23  | 34 5  | 62 23 | 94 40  | 128 20 | 160 58 |
| 13 | 10 10 | 34 58 | 63 24 | 95 47  | 129 27 | 162 2  |
| 14 | 10 57 | 35 50 | 64 25 | 96 54  | 130 34 | 163 6  |
| 15 | 11 45 | 36 43 | 65 27 | 98 1   | 131 41 | 164 9  |
| 16 | 12 32 | 37 36 | 66 29 | 99 9   | 132 47 | 165 13 |
| 17 | 13 20 | 38 30 | 67 32 | 100 17 | 133 53 | 166 17 |
| 18 | 14 8  | 39 24 | 68 34 | 101 24 | 134 59 | 167 20 |
| 19 | 14 56 | 40 18 | 69 37 | 102 32 | 136 5  | 168 24 |
| 20 | 15 44 | 41 12 | 70 40 | 103 39 | 137 11 | 169 27 |
| 21 | 16 32 | 42 7  | 71 43 | 104 47 | 138 17 | 170 31 |
| 22 | 17 21 | 43 2  | 72 47 | 105 55 | 139 23 | 171 34 |
| 23 | 18 9  | 43 57 | 73 51 | 107 2  | 140 29 | 172 38 |
| 24 | 18 58 | 44 52 | 74 55 | 108 10 | 141 35 | 173 41 |
| 25 | 19 47 | 45 48 | 75 59 | 109 17 | 142 40 | 174 44 |
| 26 | 20 36 | 46 44 | 77 3  | 110 25 | 143 45 | 175 48 |
| 27 | 21 25 | 47 41 | 78 8  | 111 33 | 144 50 | 176 51 |
| 28 | 22 14 | 48 37 | 79 13 | 112 40 | 145 55 | 177 54 |
| 29 | 23 3  | 49 34 | 80 18 | 113 48 | 147 0  | 178 57 |
| 30 | 23 53 | 50 31 | 81 23 | 114 55 | 148 5  | 180 0  |



Ad latitudinem .19. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
| 0  | 180 0  | 211 55 | 245 5  | 278 37 | 309 29 | 336 7  |
| 1  | 181 3  | 213 0  | 246 12 | 279 42 | 310 26 | 336 57 |
| 2  | 182 6  | 214 5  | 247 20 | 280 47 | 311 23 | 337 46 |
| 3  | 183 9  | 215 10 | 248 27 | 281 52 | 312 19 | 338 35 |
| 4  | 184 12 | 216 15 | 249 35 | 282 57 | 313 16 | 339 24 |
| 5  | 185 16 | 217 20 | 250 43 | 284 1  | 314 12 | 340 13 |
| 6  | 186 19 | 218 25 | 251 50 | 285 5  | 315 8  | 341 2  |
| 7  | 187 22 | 219 31 | 252 58 | 286 9  | 316 3  | 341 51 |
| 8  | 188 26 | 220 37 | 254 5  | 287 13 | 316 58 | 342 39 |
| 9  | 189 29 | 221 43 | 255 13 | 288 17 | 317 53 | 343 28 |
| 10 | 190 33 | 222 49 | 256 21 | 289 20 | 318 48 | 344 16 |
| 11 | 191 36 | 223 55 | 257 28 | 290 23 | 319 42 | 345 4  |
| 12 | 192 40 | 225 1  | 258 36 | 291 26 | 320 36 | 345 52 |
| 13 | 193 43 | 226 7  | 259 43 | 292 28 | 321 30 | 346 40 |
| 14 | 194 47 | 227 13 | 260 51 | 293 31 | 322 24 | 347 28 |
| 15 | 195 51 | 228 19 | 261 59 | 294 33 | 323 17 | 348 15 |
| 16 | 196 54 | 229 26 | 263 6  | 295 35 | 324 10 | 349 3  |
| 17 | 197 58 | 230 33 | 264 13 | 296 36 | 325 2  | 349 50 |
| 18 | 199 2  | 231 40 | 265 20 | 297 37 | 325 55 | 350 37 |
| 19 | 200 6  | 232 47 | 266 27 | 298 38 | 326 47 | 351 24 |
| 20 | 201 10 | 233 54 | 267 34 | 299 39 | 327 39 | 352 11 |
| 21 | 202 14 | 235 0  | 268 41 | 300 39 | 328 31 | 352 58 |
| 22 | 203 18 | 236 7  | 269 48 | 301 39 | 329 22 | 353 45 |
| 23 | 204 22 | 237 14 | 270 54 | 302 38 | 330 14 | 354 32 |
| 24 | 205 26 | 238 21 | 272 1  | 303 38 | 331 5  | 355 19 |
| 25 | 206 31 | 239 28 | 273 7  | 304 37 | 331 56 | 356 6  |
| 26 | 207 35 | 240 35 | 274 13 | 305 36 | 332 47 | 356 53 |
| 27 | 208 40 | 241 42 | 275 19 | 306 34 | 333 37 | 357 40 |
| 28 | 209 45 | 242 50 | 276 25 | 307 33 | 334 27 | 358 27 |
| 29 | 210 50 | 243 57 | 277 31 | 308 31 | 335 17 | 359 14 |
| 30 | 211 55 | 245 5  | 278 37 | 309 29 | 336 7  | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 23 39 | 50 6  | 80 54  | 114 30 | 147 51 |
| 1  | 0 46  | 24 28 | 51 4  | 81 59  | 115 38 | 148 57 |
| 2  | 1 32  | 25 18 | 52 2  | 83 5   | 116 46 | 150 2  |
| 3  | 2 19  | 26 8  | 53 0  | 84 11  | 117 53 | 151 7  |
| 4  | 3 5   | 26 58 | 53 58 | 85 17  | 119 2  | 152 12 |
| 5  | 3 52  | 27 48 | 54 56 | 86 23  | 120 8  | 153 17 |
| 6  | 4 38  | 28 39 | 55 55 | 87 29  | 121 16 | 154 22 |
| 7  | 5 24  | 29 30 | 56 54 | 88 36  | 122 23 | 155 27 |
| 8  | 6 11  | 30 21 | 57 54 | 89 43  | 123 31 | 156 32 |
| 9  | 6 57  | 31 12 | 58 53 | 90 50  | 124 38 | 157 37 |
| 10 | 7 44  | 32 3  | 59 53 | 91 57  | 125 45 | 158 41 |
| 11 | 8 30  | 32 55 | 60 54 | 93 4   | 126 53 | 159 46 |
| 12 | 9 17  | 33 47 | 61 55 | 94 10  | 128 0  | 160 50 |
| 13 | 10 4  | 34 39 | 62 56 | 95 18  | 129 7  | 161 54 |
| 14 | 10 51 | 35 31 | 63 57 | 96 25  | 130 14 | 162 58 |
| 15 | 11 38 | 36 23 | 64 59 | 97 33  | 131 21 | 164 2  |
| 16 | 12 25 | 37 16 | 66 1  | 98 40  | 132 28 | 165 6  |
| 17 | 13 12 | 38 10 | 67 3  | 99 48  | 133 34 | 166 10 |
| 18 | 14 0  | 39 3  | 68 6  | 100 55 | 134 41 | 167 14 |
| 19 | 14 47 | 39 57 | 69 8  | 102 3  | 135 47 | 168 18 |
| 20 | 15 35 | 40 51 | 70 11 | 103 11 | 136 53 | 169 22 |
| 21 | 16 23 | 41 45 | 71 14 | 104 18 | 138 0  | 170 26 |
| 22 | 17 11 | 42 40 | 72 18 | 105 26 | 139 6  | 171 30 |
| 23 | 17 59 | 43 34 | 73 21 | 106 34 | 140 12 | 172 34 |
| 24 | 18 47 | 44 29 | 74 25 | 107 42 | 141 18 | 173 38 |
| 25 | 19 35 | 45 24 | 75 29 | 108 50 | 142 24 | 174 42 |
| 26 | 20 23 | 46 20 | 76 34 | 109 58 | 143 30 | 175 46 |
| 27 | 21 12 | 47 16 | 77 39 | 111 6  | 144 35 | 176 50 |
| 28 | 22 1  | 48 13 | 78 44 | 112 14 | 145 41 | 177 53 |
| 29 | 22 50 | 49 9  | 79 49 | 113 22 | 146 46 | 178 57 |
| 30 | 23 39 | 50 6  | 80 54 | 114 30 | 147 51 | 180 0  |



Ed latitudinem .20. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎ |
|----|--------|--------|--------|--------|--------|--------|---|
| ♏  | ♐      | ♑      | ♒      | ♓      | ♈      | ♉      | ♊ |
| 0  | 180 0  | 212 9  | 245 30 | 279 6  | 309 54 | 336 21 |   |
| 1  | 181 3  | 213 14 | 246 38 | 280 11 | 310 51 | 337 10 |   |
| 2  | 182 7  | 214 19 | 247 46 | 281 16 | 311 47 | 337 59 |   |
| 3  | 183 10 | 215 25 | 248 54 | 282 21 | 312 44 | 338 48 |   |
| 4  | 184 14 | 216 30 | 250 2  | 283 26 | 313 40 | 339 37 |   |
| 5  | 185 18 | 217 36 | 251 10 | 284 31 | 314 36 | 340 25 |   |
| 6  | 186 22 | 218 42 | 252 18 | 285 35 | 315 31 | 341 13 |   |
| 7  | 187 26 | 219 48 | 253 26 | 286 39 | 316 26 | 342 1  |   |
| 8  | 188 30 | 220 54 | 254 34 | 287 42 | 317 20 | 342 49 |   |
| 9  | 189 34 | 222 0  | 255 42 | 288 46 | 318 15 | 343 37 |   |
| 10 | 190 38 | 223 7  | 256 49 | 289 49 | 319 9  | 344 25 |   |
| 11 | 191 42 | 224 13 | 257 57 | 290 52 | 320 3  | 345 13 |   |
| 12 | 192 46 | 225 19 | 259 5  | 291 54 | 320 57 | 346 0  |   |
| 13 | 193 50 | 226 26 | 260 12 | 292 57 | 321 50 | 346 48 |   |
| 14 | 194 54 | 227 32 | 261 20 | 293 59 | 322 44 | 347 35 |   |
| 15 | 195 58 | 228 39 | 262 27 | 295 1  | 323 37 | 348 22 |   |
| 16 | 197 2  | 229 46 | 263 35 | 296 3  | 324 29 | 349 9  |   |
| 17 | 198 6  | 230 53 | 264 42 | 297 4  | 325 21 | 349 56 |   |
| 18 | 199 10 | 232 0  | 265 49 | 298 5  | 326 13 | 350 43 |   |
| 19 | 200 14 | 233 7  | 266 56 | 299 6  | 327 5  | 351 30 |   |
| 20 | 201 19 | 234 15 | 268 3  | 300 7  | 327 57 | 352 16 |   |
| 21 | 202 23 | 235 22 | 269 10 | 301 7  | 328 48 | 353 3  |   |
| 22 | 203 28 | 236 29 | 270 17 | 302 6  | 329 39 | 353 49 |   |
| 23 | 204 33 | 237 37 | 271 24 | 303 6  | 330 30 | 354 36 |   |
| 24 | 205 38 | 238 44 | 272 31 | 304 5  | 331 21 | 355 22 |   |
| 25 | 206 43 | 239 52 | 273 37 | 305 4  | 332 12 | 356 8  |   |
| 26 | 207 48 | 240 59 | 274 43 | 306 2  | 333 2  | 356 55 |   |
| 27 | 208 53 | 242 7  | 275 49 | 307 0  | 333 52 | 357 41 |   |
| 28 | 209 58 | 243 14 | 276 55 | 307 58 | 334 42 | 358 28 |   |
| 29 | 211 3  | 244 22 | 278 1  | 308 56 | 335 32 | 359 14 |   |
| 30 | 212 9  | 245 30 | 279 6  | 309 54 | 336 21 | 360 0  |   |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 23 25 | 49 41 | 80 23  | 114 5  | 147 37 |
| 1  | 0 45  | 24 14 | 50 38 | 81 29  | 115 13 | 148 43 |
| 2  | 1 31  | 25 3  | 51 36 | 82 35  | 116 21 | 149 49 |
| 3  | 2 17  | 25 52 | 52 34 | 83 41  | 117 29 | 150 54 |
| 4  | 3 3   | 26 41 | 53 32 | 84 47  | 118 37 | 152 0  |
| 5  | 3 49  | 27 31 | 54 30 | 85 53  | 119 45 | 153 5  |
| 6  | 4 35  | 28 21 | 55 29 | 86 59  | 120 53 | 154 11 |
| 7  | 5 21  | 29 11 | 56 28 | 88 6   | 122 1  | 155 16 |
| 8  | 6 7   | 30 2  | 57 27 | 89 13  | 123 8  | 156 21 |
| 9  | 6 53  | 30 53 | 58 26 | 90 20  | 124 16 | 157 26 |
| 10 | 7 39  | 31 44 | 59 26 | 91 27  | 125 23 | 158 31 |
| 11 | 8 25  | 32 35 | 60 26 | 92 34  | 126 31 | 159 35 |
| 12 | 9 11  | 33 26 | 61 27 | 93 41  | 127 38 | 160 41 |
| 13 | 9 58  | 34 18 | 62 28 | 94 49  | 128 46 | 161 46 |
| 14 | 10 44 | 35 10 | 63 29 | 95 56  | 129 53 | 162 51 |
| 15 | 11 31 | 36 2  | 64 30 | 97 4   | 131 0  | 163 55 |
| 16 | 12 17 | 36 55 | 65 32 | 98 12  | 132 7  | 165 0  |
| 17 | 13 4  | 37 48 | 66 34 | 99 20  | 133 14 | 166 4  |
| 18 | 13 51 | 38 41 | 67 36 | 100 28 | 134 21 | 167 9  |
| 19 | 14 38 | 39 35 | 68 38 | 101 36 | 135 28 | 168 13 |
| 20 | 15 25 | 40 29 | 69 41 | 102 44 | 136 34 | 169 17 |
| 21 | 16 12 | 41 23 | 70 44 | 103 52 | 137 41 | 170 22 |
| 22 | 17 0  | 42 17 | 71 47 | 105 0  | 138 48 | 171 26 |
| 23 | 17 47 | 43 11 | 72 51 | 106 8  | 139 54 | 172 31 |
| 24 | 18 35 | 44 6  | 73 55 | 107 16 | 141 1  | 173 35 |
| 25 | 19 23 | 45 1  | 74 59 | 108 24 | 142 7  | 174 39 |
| 26 | 20 11 | 45 56 | 76 3  | 109 32 | 143 13 | 175 44 |
| 27 | 20 59 | 46 52 | 77 8  | 110 40 | 144 19 | 176 48 |
| 28 | 21 48 | 47 48 | 78 13 | 111 48 | 145 25 | 177 52 |
| 29 | 22 36 | 48 44 | 79 18 | 112 56 | 146 31 | 178 56 |
| 30 | 23 25 | 49 41 | 80 23 | 114 5  | 147 37 | 180 0  |



Ad latitudinem .21. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 212 23 | 245 55 | 279 37 | 310 19 | 336 35 |
| 1  | 181 4  | 213 29 | 247 4  | 280 42 | 311 16 | 337 24 |
| 2  | 182 8  | 214 35 | 248 12 | 281 47 | 312 12 | 338 12 |
| 3  | 183 12 | 215 41 | 249 20 | 282 52 | 313 8  | 339 1  |
| 4  | 184 16 | 216 47 | 250 28 | 283 57 | 314 4  | 339 49 |
| 5  | 185 21 | 217 53 | 251 36 | 285 1  | 314 59 | 340 37 |
| 6  | 186 25 | 218 59 | 252 44 | 286 5  | 315 54 | 341 25 |
| 7  | 187 29 | 220 6  | 253 52 | 287 9  | 316 49 | 342 13 |
| 8  | 188 34 | 221 12 | 255 0  | 288 13 | 317 43 | 343 0  |
| 9  | 189 38 | 222 19 | 256 8  | 289 16 | 318 37 | 343 48 |
| 10 | 190 43 | 223 26 | 257 16 | 290 19 | 319 31 | 344 35 |
| 11 | 191 47 | 224 32 | 258 24 | 291 22 | 320 25 | 345 22 |
| 12 | 192 51 | 225 39 | 259 32 | 292 24 | 321 19 | 346 9  |
| 13 | 193 56 | 226 46 | 260 40 | 293 26 | 322 12 | 346 56 |
| 14 | 195 0  | 227 53 | 261 48 | 294 28 | 323 5  | 347 43 |
| 15 | 196 5  | 229 0  | 262 56 | 295 30 | 323 58 | 348 29 |
| 16 | 197 9  | 230 7  | 264 4  | 296 31 | 324 50 | 349 16 |
| 17 | 198 14 | 231 14 | 265 11 | 297 32 | 325 42 | 350 2  |
| 18 | 199 19 | 232 22 | 266 19 | 298 33 | 326 34 | 350 49 |
| 19 | 200 25 | 233 29 | 267 26 | 299 34 | 327 25 | 351 35 |
| 20 | 201 29 | 234 37 | 268 33 | 300 34 | 328 16 | 352 21 |
| 21 | 202 34 | 235 44 | 269 40 | 301 34 | 329 7  | 353 7  |
| 22 | 203 39 | 236 52 | 270 47 | 302 33 | 329 58 | 353 53 |
| 23 | 204 44 | 237 59 | 271 54 | 303 32 | 330 49 | 354 39 |
| 24 | 205 49 | 239 7  | 273 1  | 304 31 | 331 39 | 355 25 |
| 25 | 206 55 | 240 15 | 274 3  | 305 30 | 332 29 | 356 11 |
| 26 | 208 0  | 241 23 | 275 13 | 306 28 | 333 19 | 356 57 |
| 27 | 209 6  | 242 31 | 276 19 | 307 26 | 334 8  | 357 43 |
| 28 | 210 11 | 243 39 | 277 25 | 308 24 | 334 57 | 358 29 |
| 29 | 211 17 | 244 47 | 278 31 | 309 22 | 335 46 | 359 15 |
| 30 | 212 23 | 245 55 | 279 37 | 310 19 | 336 35 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 23 11 | 49 15 | 79 52  | 113 39 | 147 23 |
| 1  | 0 45  | 23 59 | 50 12 | 80 58  | 114 48 | 148 29 |
| 2  | 1 30  | 24 48 | 51 9  | 82 4   | 115 56 | 149 35 |
| 3  | 2 16  | 25 37 | 52 6  | 83 10  | 117 4  | 150 41 |
| 4  | 3 1   | 26 26 | 53 4  | 84 16  | 118 12 | 151 47 |
| 5  | 3 47  | 27 15 | 54 2  | 85 23  | 119 20 | 152 53 |
| 6  | 4 32  | 28 5  | 55 0  | 86 29  | 120 28 | 154 2  |
| 7  | 5 18  | 28 55 | 55 59 | 87 36  | 121 36 | 155 8  |
| 8  | 6 3   | 29 45 | 56 58 | 88 43  | 122 44 | 156 14 |
| 9  | 6 49  | 30 35 | 57 57 | 89 50  | 123 52 | 157 17 |
| 10 | 7 35  | 31 26 | 58 57 | 90 57  | 125 0  | 158 22 |
| 11 | 8 20  | 32 17 | 59 57 | 92 4   | 126 8  | 159 28 |
| 12 | 9 6   | 33 8  | 60 58 | 93 12  | 127 16 | 160 33 |
| 13 | 9 52  | 33 59 | 61 59 | 94 19  | 128 24 | 161 38 |
| 14 | 10 38 | 34 50 | 63 0  | 95 27  | 129 32 | 162 43 |
| 15 | 11 24 | 35 42 | 64 1  | 96 35  | 130 40 | 163 48 |
| 16 | 12 10 | 36 34 | 65 3  | 97 43  | 131 48 | 164 53 |
| 17 | 12 56 | 37 27 | 66 5  | 98 51  | 132 55 | 165 58 |
| 18 | 13 43 | 38 20 | 67 7  | 99 59  | 134 2  | 167 3  |
| 19 | 14 29 | 39 13 | 68 9  | 101 7  | 135 9  | 168 8  |
| 20 | 15 16 | 40 6  | 69 11 | 102 15 | 136 16 | 169 13 |
| 21 | 16 3  | 41 0  | 70 14 | 103 23 | 137 23 | 170 18 |
| 22 | 16 50 | 41 54 | 71 17 | 104 31 | 138 30 | 171 23 |
| 23 | 17 37 | 42 48 | 72 21 | 105 39 | 139 37 | 172 28 |
| 24 | 18 24 | 43 42 | 73 25 | 106 47 | 140 44 | 173 33 |
| 25 | 19 11 | 44 36 | 74 29 | 107 56 | 141 51 | 174 37 |
| 26 | 19 59 | 45 31 | 75 33 | 109 5  | 142 58 | 175 42 |
| 27 | 20 47 | 46 27 | 76 37 | 110 14 | 144 4  | 176 47 |
| 28 | 21 35 | 47 23 | 77 42 | 111 22 | 145 11 | 177 51 |
| 29 | 22 23 | 48 19 | 78 47 | 112 31 | 146 17 | 178 56 |
| 30 | 23 11 | 49 15 | 79 52 | 113 39 | 147 23 | 180 0  |



Ad latitudinem .22. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 212 37 | 246 21 | 280 8  | 310 45 | 336 49 |
| 1  | 181 9  | 213 43 | 247 29 | 281 13 | 311 41 | 337 37 |
| 2  | 182 4  | 214 49 | 248 38 | 282 18 | 312 37 | 338 25 |
| 3  | 183 13 | 215 56 | 249 46 | 283 23 | 313 33 | 339 13 |
| 4  | 184 18 | 217 2  | 250 55 | 284 37 | 314 29 | 340 1  |
| 5  | 185 23 | 218 9  | 252 4  | 285 31 | 315 24 | 340 49 |
| 6  | 186 27 | 219 16 | 253 13 | 286 35 | 316 18 | 341 36 |
| 7  | 187 32 | 220 23 | 254 21 | 287 39 | 317 12 | 342 23 |
| 8  | 188 37 | 221 30 | 255 29 | 288 43 | 318 6  | 343 10 |
| 9  | 189 42 | 222 37 | 256 37 | 289 46 | 319 0  | 343 57 |
| 10 | 190 47 | 223 44 | 257 45 | 290 49 | 319 54 | 344 44 |
| 11 | 191 52 | 224 51 | 258 53 | 291 51 | 320 47 | 345 31 |
| 12 | 192 57 | 225 58 | 260 1  | 292 53 | 321 40 | 346 17 |
| 13 | 194 2  | 227 5  | 261 9  | 293 55 | 322 33 | 347 4  |
| 14 | 195 7  | 228 12 | 262 17 | 294 57 | 323 26 | 347 50 |
| 15 | 196 12 | 229 20 | 263 25 | 295 59 | 324 18 | 348 36 |
| 16 | 197 17 | 230 28 | 264 33 | 297 0  | 325 10 | 349 22 |
| 17 | 198 22 | 231 36 | 265 41 | 298 1  | 326 1  | 350 8  |
| 18 | 199 27 | 232 44 | 266 48 | 299 2  | 326 52 | 350 54 |
| 16 | 200 32 | 233 52 | 267 56 | 300 3  | 327 43 | 351 40 |
| 20 | 201 38 | 235 0  | 269 3  | 301 3  | 328 34 | 352 25 |
| 21 | 202 43 | 236 8  | 270 10 | 302 3  | 329 25 | 353 11 |
| 22 | 203 48 | 237 16 | 271 17 | 303 2  | 330 15 | 353 57 |
| 23 | 204 53 | 238 24 | 272 24 | 304 1  | 331 5  | 354 42 |
| 24 | 205 58 | 239 32 | 273 31 | 305 0  | 331 55 | 355 28 |
| 25 | 207 7  | 240 40 | 274 37 | 305 58 | 332 45 | 356 13 |
| 26 | 208 13 | 241 48 | 275 44 | 306 56 | 333 34 | 356 59 |
| 27 | 209 19 | 242 56 | 276 50 | 307 54 | 334 23 | 357 44 |
| 28 | 210 25 | 244 4  | 277 56 | 308 51 | 335 12 | 358 30 |
| 29 | 211 31 | 245 12 | 279 2  | 309 48 | 336 1  | 359 15 |
| 30 | 212 37 | 246 21 | 280 8  | 310 45 | 336 49 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | V     | ♄     | ♅     | ♆      | ♇      | ♈      |
|----|-------|-------|-------|--------|--------|--------|
| ♄  | ♄ m   | ♄ m   | ♄ m   | ♄ m    | ♄ m    | ♄ m    |
| 0  | 0 0   | 22 57 | 48 49 | 79 22  | 113 13 | 147 9  |
| 1  | 0 44  | 23 45 | 49 46 | 80 28  | 114 22 | 148 16 |
| 2  | 1 29  | 24 33 | 50 43 | 81 34  | 115 31 | 149 22 |
| 3  | 2 14  | 25 22 | 51 40 | 82 40  | 116 39 | 150 29 |
| 4  | 2 59  | 26 10 | 52 37 | 83 46  | 117 48 | 151 35 |
| 5  | 3 44  | 26 59 | 53 35 | 84 52  | 118 56 | 152 41 |
| 6  | 4 29  | 27 48 | 54 33 | 85 58  | 120 5  | 153 48 |
| 7  | 5 14  | 28 37 | 55 31 | 87 5   | 121 13 | 154 54 |
| 8  | 5 59  | 29 27 | 56 30 | 88 12  | 122 21 | 156 0  |
| 9  | 6 44  | 30 17 | 57 29 | 89 19  | 123 29 | 157 6  |
| 10 | 7 30  | 31 7  | 58 28 | 90 26  | 124 37 | 158 12 |
| 11 | 8 15  | 31 57 | 59 28 | 91 33  | 125 46 | 159 18 |
| 12 | 9 0   | 32 48 | 60 28 | 92 41  | 126 54 | 160 24 |
| 13 | 9 46  | 33 39 | 61 29 | 93 49  | 128 3  | 161 30 |
| 14 | 10 31 | 34 30 | 62 30 | 94 57  | 129 11 | 162 36 |
| 15 | 11 17 | 35 21 | 63 31 | 96 5   | 130 19 | 163 41 |
| 16 | 12 2  | 36 13 | 64 32 | 97 13  | 131 27 | 164 47 |
| 17 | 12 48 | 37 5  | 65 34 | 98 21  | 132 35 | 165 52 |
| 18 | 13 34 | 37 57 | 66 36 | 99 29  | 133 42 | 166 58 |
| 19 | 14 20 | 38 50 | 67 38 | 100 37 | 134 50 | 168 3  |
| 20 | 15 6  | 39 43 | 68 40 | 101 46 | 135 57 | 169 8  |
| 21 | 15 52 | 40 36 | 69 43 | 102 54 | 137 5  | 170 14 |
| 22 | 16 39 | 41 30 | 70 46 | 104 3  | 138 13 | 171 19 |
| 23 | 17 25 | 42 24 | 71 50 | 105 11 | 139 20 | 172 24 |
| 24 | 18 12 | 43 18 | 72 54 | 106 20 | 140 28 | 173 29 |
| 25 | 18 59 | 44 12 | 73 58 | 107 29 | 141 35 | 174 34 |
| 26 | 19 46 | 45 7  | 75 2  | 108 28 | 142 42 | 175 40 |
| 27 | 20 34 | 46 2  | 76 7  | 109 47 | 143 49 | 176 45 |
| 28 | 21 21 | 46 57 | 77 12 | 110 56 | 144 56 | 177 50 |
| 29 | 22 9  | 47 53 | 78 17 | 112 5  | 146 3  | 178 55 |
| 30 | 22 57 | 48 49 | 79 22 | 113 13 | 147 9  | 180 9  |



Ad latitudinem .23. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 212 51 | 246 47 | 280 38 | 311 11 | 337 3  |
| 1  | 181 5  | 213 57 | 247 55 | 281 43 | 312 7  | 337 51 |
| 2  | 182 10 | 215 4  | 249 4  | 282 48 | 313 3  | 338 39 |
| 3  | 183 15 | 216 11 | 250 13 | 283 53 | 313 58 | 339 26 |
| 4  | 184 20 | 217 18 | 251 22 | 284 58 | 314 53 | 340 14 |
| 5  | 185 26 | 218 25 | 252 31 | 286 2  | 315 48 | 341 1  |
| 6  | 186 31 | 219 32 | 253 40 | 287 6  | 316 42 | 341 48 |
| 7  | 187 36 | 220 40 | 254 49 | 288 10 | 317 36 | 342 35 |
| 8  | 188 41 | 221 47 | 255 57 | 289 14 | 318 30 | 343 21 |
| 9  | 189 46 | 222 55 | 257 6  | 290 17 | 319 24 | 344 8  |
| 10 | 190 52 | 224 3  | 258 14 | 291 20 | 320 17 | 344 54 |
| 11 | 191 57 | 225 10 | 259 23 | 292 22 | 321 10 | 345 40 |
| 12 | 193 2  | 226 18 | 260 31 | 293 24 | 322 3  | 346 26 |
| 13 | 194 8  | 227 25 | 261 39 | 294 26 | 322 55 | 347 12 |
| 14 | 195 13 | 228 33 | 262 47 | 295 28 | 323 47 | 347 58 |
| 15 | 196 19 | 229 41 | 263 55 | 296 29 | 324 39 | 348 43 |
| 16 | 197 24 | 230 49 | 265 3  | 297 30 | 325 30 | 349 29 |
| 17 | 198 30 | 231 57 | 266 11 | 298 31 | 326 21 | 350 14 |
| 18 | 199 36 | 233 6  | 267 19 | 299 32 | 327 12 | 351 0  |
| 19 | 200 42 | 234 14 | 268 27 | 300 32 | 328 3  | 351 45 |
| 20 | 201 48 | 235 23 | 269 34 | 301 32 | 328 55 | 352 30 |
| 21 | 202 54 | 236 31 | 270 41 | 302 31 | 329 43 | 353 16 |
| 22 | 204 0  | 237 39 | 271 48 | 303 30 | 333 33 | 354 1  |
| 23 | 205 6  | 238 47 | 272 55 | 304 29 | 331 23 | 354 46 |
| 24 | 206 12 | 239 55 | 274 2  | 305 27 | 332 12 | 355 31 |
| 25 | 207 19 | 241 4  | 275 8  | 306 25 | 333 1  | 356 16 |
| 26 | 208 25 | 242 12 | 276 14 | 307 22 | 333 50 | 357 1  |
| 27 | 209 31 | 243 21 | 277 20 | 308 20 | 334 38 | 357 46 |
| 28 | 210 38 | 244 29 | 278 26 | 309 17 | 335 27 | 358 31 |
| 29 | 211 44 | 245 38 | 279 32 | 310 14 | 336 15 | 359 16 |
| 30 | 212 51 | 246 47 | 280 38 | 311 11 | 337 3  | 360 0  |

DB 2



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 22 42 | 48 22 | 78 50  | 112 46 | 146 54 |
| 1  | 0 44  | 23 30 | 49 18 | 79 56  | 113 55 | 148 1  |
| 2  | 1 28  | 24 18 | 50 15 | 81 2   | 115 4  | 149 8  |
| 3  | 2 13  | 25 6  | 51 12 | 82 8   | 116 13 | 150 15 |
| 4  | 2 57  | 25 54 | 52 9  | 83 14  | 117 21 | 151 22 |
| 5  | 3 42  | 26 42 | 53 7  | 84 20  | 118 31 | 152 29 |
| 6  | 4 26  | 27 31 | 54 5  | 85 27  | 119 40 | 153 36 |
| 7  | 5 11  | 28 20 | 55 3  | 86 34  | 120 49 | 154 43 |
| 8  | 5 55  | 29 9  | 56 1  | 87 41  | 121 58 | 155 49 |
| 9  | 6 40  | 29 58 | 57 0  | 88 48  | 123 6  | 156 56 |
| 10 | 7 25  | 30 38 | 57 59 | 89 55  | 124 14 | 158 2  |
| 11 | 8 9   | 31 48 | 58 59 | 91 2   | 125 23 | 159 9  |
| 12 | 8 54  | 32 28 | 59 59 | 92 10  | 126 32 | 160 15 |
| 13 | 9 39  | 33 18 | 60 59 | 93 18  | 127 41 | 161 21 |
| 14 | 10 24 | 34 9  | 61 59 | 94 26  | 128 50 | 162 27 |
| 15 | 11 9  | 35 0  | 63 0  | 95 34  | 129 58 | 163 33 |
| 16 | 11 54 | 35 52 | 64 1  | 96 42  | 131 6  | 164 39 |
| 17 | 12 39 | 36 44 | 65 3  | 97 52  | 132 14 | 165 45 |
| 18 | 13 25 | 37 36 | 66 5  | 98 59  | 133 22 | 166 51 |
| 19 | 14 10 | 38 28 | 67 7  | 100 8  | 134 30 | 167 57 |
| 20 | 14 56 | 39 20 | 68 9  | 101 18 | 135 38 | 169 3  |
| 21 | 15 42 | 40 13 | 69 12 | 102 25 | 136 46 | 170 9  |
| 22 | 16 28 | 41 9  | 70 15 | 103 34 | 137 54 | 171 15 |
| 23 | 17 14 | 41 59 | 71 18 | 104 42 | 139 2  | 172 21 |
| 24 | 18 0  | 42 53 | 72 22 | 105 52 | 140 10 | 173 27 |
| 25 | 18 47 | 43 47 | 73 26 | 107 1  | 141 18 | 174 32 |
| 26 | 19 34 | 44 41 | 74 30 | 108 10 | 142 26 | 175 38 |
| 27 | 20 21 | 45 36 | 75 35 | 109 19 | 143 33 | 176 44 |
| 28 | 21 8  | 46 31 | 76 40 | 110 28 | 144 40 | 177 49 |
| 29 | 21 55 | 47 26 | 77 45 | 111 37 | 145 46 | 178 55 |
| 30 | 22 42 | 48 22 | 78 50 | 112 46 | 146 54 | 180 0  |



Altitudinem .24. Graduum

|    | α      | β      | γ      | δ      | ε      | ζ      | η   |
|----|--------|--------|--------|--------|--------|--------|-----|
| h  | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 213 6  | 247 14 | 281 10 | 311 38 | 337 18 |     |
| 1  | 181 5  | 214 13 | 248 23 | 282 15 | 312 34 | 338 5  |     |
| 2  | 182 11 | 215 20 | 249 32 | 283 20 | 313 29 | 338 52 |     |
| 3  | 183 16 | 216 27 | 250 41 | 284 25 | 314 24 | 339 39 |     |
| 4  | 184 22 | 217 34 | 251 50 | 285 30 | 315 19 | 340 26 |     |
| 5  | 185 28 | 218 42 | 252 59 | 286 34 | 316 13 | 341 13 |     |
| 6  | 186 33 | 219 50 | 254 8  | 287 38 | 317 7  | 342 0  |     |
| 7  | 187 39 | 220 58 | 255 17 | 288 42 | 318 1  | 342 46 |     |
| 8  | 188 45 | 222 6  | 256 26 | 289 45 | 318 54 | 343 32 |     |
| 9  | 189 51 | 223 14 | 257 35 | 290 48 | 319 47 | 344 18 |     |
| 10 | 190 57 | 224 22 | 258 43 | 291 51 | 320 40 | 345 4  |     |
| 11 | 192 3  | 225 30 | 259 52 | 292 53 | 321 32 | 345 50 |     |
| 12 | 193 9  | 226 38 | 261 1  | 293 55 | 322 24 | 346 35 |     |
| 13 | 194 15 | 227 46 | 262 9  | 294 57 | 323 16 | 347 21 |     |
| 14 | 195 21 | 228 54 | 263 18 | 295 59 | 324 8  | 348 6  |     |
| 15 | 196 27 | 230 2  | 264 26 | 297 0  | 325 0  | 348 51 |     |
| 16 | 197 33 | 231 10 | 265 34 | 298 1  | 325 51 | 349 36 |     |
| 17 | 198 39 | 232 19 | 266 42 | 299 1  | 326 42 | 350 21 |     |
| 18 | 199 45 | 233 28 | 267 50 | 300 1  | 327 32 | 351 6  |     |
| 19 | 200 51 | 234 37 | 268 58 | 301 1  | 328 22 | 351 51 |     |
| 20 | 201 58 | 235 46 | 270 5  | 302 1  | 329 12 | 352 25 |     |
| 21 | 203 4  | 236 54 | 271 12 | 303 0  | 330 2  | 353 20 |     |
| 22 | 204 11 | 238 3  | 272 19 | 303 59 | 330 51 | 354 5  |     |
| 23 | 205 17 | 239 11 | 273 26 | 304 58 | 331 40 | 354 49 |     |
| 24 | 206 24 | 240 20 | 274 33 | 305 55 | 332 29 | 355 34 |     |
| 25 | 207 31 | 241 29 | 275 40 | 306 53 | 333 18 | 356 18 |     |
| 26 | 208 38 | 242 38 | 276 46 | 307 51 | 334 6  | 357 3  |     |
| 27 | 209 45 | 243 47 | 277 52 | 308 48 | 334 54 | 357 47 |     |
| 28 | 210 52 | 244 56 | 278 58 | 309 45 | 335 42 | 358 32 |     |
| 29 | 211 59 | 246 5  | 280 4  | 310 42 | 336 30 | 359 16 |     |
| 30 | 213 6  | 247 14 | 281 10 | 311 38 | 337 18 | 360 0  |     |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | np     |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 22 27 | 47 54 | 78 18  | 112 18 | 146 39 |
| 1  | 0 43  | 23 14 | 48 50 | 79 24  | 113 28 | 147 47 |
| 2  | 1 27  | 24 1  | 49 47 | 80 30  | 114 37 | 148 55 |
| 3  | 2 11  | 24 49 | 50 44 | 81 36  | 115 47 | 150 2  |
| 4  | 2 55  | 25 36 | 51 41 | 82 42  | 116 56 | 151 10 |
| 5  | 3 39  | 26 24 | 52 38 | 83 48  | 118 5  | 152 17 |
| 6  | 4 23  | 27 13 | 53 36 | 84 55  | 119 15 | 153 24 |
| 7  | 5 7   | 28 2  | 54 34 | 86 2   | 120 24 | 154 31 |
| 8  | 5 51  | 28 51 | 55 32 | 87 9   | 121 33 | 155 38 |
| 9  | 6 35  | 29 40 | 56 30 | 88 16  | 122 42 | 156 45 |
| 10 | 7 20  | 30 29 | 57 29 | 89 24  | 123 51 | 157 52 |
| 11 | 8 4   | 31 19 | 58 29 | 90 32  | 125 1  | 158 59 |
| 12 | 8 48  | 32 9  | 59 29 | 91 40  | 126 10 | 160 6  |
| 13 | 9 33  | 32 59 | 60 29 | 92 48  | 127 19 | 161 13 |
| 14 | 10 17 | 33 49 | 61 29 | 93 56  | 128 28 | 162 20 |
| 15 | 11 2  | 34 39 | 62 30 | 95 4   | 129 37 | 163 26 |
| 16 | 11 46 | 35 30 | 63 31 | 96 12  | 130 46 | 164 33 |
| 17 | 12 31 | 36 22 | 64 33 | 97 21  | 131 54 | 165 39 |
| 18 | 13 16 | 37 13 | 65 34 | 98 29  | 133 3  | 166 46 |
| 19 | 14 1  | 38 5  | 66 36 | 99 38  | 134 11 | 167 52 |
| 20 | 14 46 | 38 57 | 67 38 | 100 47 | 135 19 | 168 58 |
| 21 | 15 31 | 39 49 | 68 41 | 101 46 | 136 28 | 170 5  |
| 22 | 16 17 | 40 42 | 69 44 | 103 5  | 137 36 | 171 11 |
| 23 | 17 3  | 41 35 | 70 47 | 104 14 | 138 44 | 172 17 |
| 24 | 17 49 | 42 28 | 71 50 | 105 23 | 139 52 | 173 23 |
| 25 | 18 35 | 43 21 | 72 54 | 106 32 | 141 0  | 174 29 |
| 26 | 19 21 | 44 15 | 73 58 | 107 41 | 142 8  | 175 36 |
| 27 | 20 7  | 45 10 | 75 3  | 108 50 | 143 16 | 176 42 |
| 28 | 20 54 | 46 4  | 76 8  | 109 59 | 144 24 | 177 48 |
| 29 | 21 40 | 46 59 | 77 13 | 111 8  | 145 32 | 178 52 |
| 30 | 22 27 | 47 54 | 78 18 | 112 18 | 146 39 | 180 0  |



Ad latitudinem .25. Graduum

|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | X. 1   |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|--------|
| 0  | 180 | 0  | 213 | 21 | 247 | 42 | 281 | 42 | 312 | 6  | 337 33 |
| 1  | 181 | 6  | 214 | 28 | 248 | 52 | 282 | 47 | 313 | 1  | 338 20 |
| 2  | 182 | 12 | 215 | 36 | 250 | 1  | 283 | 52 | 313 | 56 | 339 6  |
| 3  | 183 | 18 | 216 | 44 | 251 | 10 | 284 | 57 | 314 | 50 | 339 53 |
| 4  | 184 | 24 | 217 | 52 | 252 | 19 | 286 | 2  | 315 | 45 | 340 39 |
| 5  | 185 | 31 | 219 | 0  | 253 | 28 | 287 | 6  | 316 | 39 | 341 25 |
| 6  | 186 | 37 | 220 | 8  | 254 | 37 | 288 | 10 | 317 | 32 | 342 11 |
| 7  | 187 | 43 | 221 | 16 | 255 | 46 | 289 | 13 | 318 | 25 | 342 57 |
| 8  | 188 | 49 | 222 | 24 | 256 | 55 | 290 | 16 | 319 | 18 | 343 43 |
| 9  | 189 | 55 | 223 | 32 | 258 | 4  | 291 | 19 | 320 | 11 | 344 29 |
| 10 | 191 | 2  | 224 | 41 | 259 | 13 | 292 | 22 | 321 | 3  | 345 14 |
| 11 | 192 | 8  | 225 | 49 | 260 | 22 | 293 | 24 | 321 | 55 | 345 59 |
| 12 | 193 | 14 | 226 | 57 | 261 | 31 | 294 | 26 | 322 | 47 | 346 44 |
| 13 | 194 | 21 | 228 | 6  | 262 | 39 | 295 | 27 | 323 | 38 | 347 29 |
| 14 | 195 | 27 | 229 | 14 | 263 | 48 | 296 | 29 | 324 | 30 | 348 14 |
| 15 | 196 | 34 | 230 | 23 | 264 | 56 | 297 | 30 | 325 | 19 | 348 58 |
| 16 | 197 | 40 | 231 | 32 | 266 | 4  | 298 | 31 | 326 | 11 | 349 43 |
| 17 | 198 | 47 | 232 | 41 | 267 | 12 | 299 | 31 | 327 | 1  | 350 27 |
| 18 | 199 | 54 | 233 | 50 | 268 | 20 | 300 | 31 | 327 | 51 | 351 12 |
| 19 | 201 | 1  | 234 | 59 | 269 | 28 | 301 | 31 | 328 | 41 | 351 56 |
| 20 | 202 | 8  | 236 | 9  | 270 | 36 | 302 | 31 | 329 | 31 | 352 40 |
| 21 | 203 | 15 | 237 | 18 | 271 | 44 | 303 | 30 | 330 | 20 | 353 25 |
| 22 | 204 | 22 | 238 | 27 | 272 | 51 | 304 | 28 | 331 | 9  | 354 9  |
| 23 | 205 | 29 | 239 | 36 | 273 | 58 | 305 | 26 | 331 | 58 | 354 53 |
| 24 | 206 | 36 | 240 | 45 | 274 | 5  | 306 | 24 | 332 | 47 | 355 37 |
| 25 | 207 | 43 | 241 | 55 | 276 | 12 | 307 | 22 | 333 | 36 | 356 21 |
| 26 | 208 | 50 | 243 | 4  | 277 | 18 | 308 | 19 | 334 | 24 | 357 5  |
| 27 | 209 | 58 | 244 | 13 | 278 | 24 | 309 | 16 | 335 | 11 | 357 49 |
| 28 | 211 | 5  | 245 | 23 | 279 | 30 | 310 | 13 | 335 | 59 | 358 33 |
| 29 | 212 | 13 | 246 | 32 | 280 | 36 | 311 | 10 | 336 | 46 | 359 17 |
| 30 | 213 | 21 | 247 | 42 | 281 | 42 | 312 | 6  | 337 | 33 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 22 12 | 47 28 | 77 45  | 111 52 | 146 24 |
| 1  | 0 43  | 22 59 | 48 24 | 78 51  | 113 2  | 147 32 |
| 2  | 1 26  | 23 6  | 49 20 | 79 57  | 114 12 | 148 40 |
| 3  | 2 10  | 24 33 | 50 16 | 81 3   | 115 21 | 149 48 |
| 4  | 2 53  | 25 20 | 51 12 | 82 9   | 116 31 | 150 56 |
| 5  | 3 37  | 26 7  | 52 9  | 83 16  | 117 40 | 152 4  |
| 6  | 4 20  | 26 55 | 53 6  | 84 23  | 118 50 | 153 12 |
| 7  | 5 4   | 27 43 | 54 4  | 85 30  | 119 59 | 154 20 |
| 8  | 5 47  | 28 31 | 55 2  | 86 37  | 121 9  | 155 27 |
| 9  | 6 31  | 29 20 | 56 0  | 87 44  | 122 18 | 156 35 |
| 10 | 7 15  | 30 9  | 56 59 | 88 52  | 123 27 | 157 42 |
| 11 | 7 58  | 30 58 | 57 58 | 90 0   | 124 37 | 158 50 |
| 12 | 8 42  | 31 47 | 58 58 | 91 8   | 125 47 | 159 57 |
| 13 | 9 26  | 32 37 | 59 58 | 92 16  | 126 56 | 161 4  |
| 14 | 10 10 | 33 27 | 60 58 | 93 24  | 128 6  | 162 11 |
| 15 | 10 54 | 34 17 | 61 58 | 94 32  | 129 15 | 163 18 |
| 16 | 11 38 | 35 8  | 62 59 | 95 41  | 130 24 | 164 25 |
| 17 | 12 22 | 35 59 | 64 0  | 96 50  | 131 33 | 165 32 |
| 18 | 13 6  | 36 50 | 65 2  | 97 59  | 132 42 | 166 39 |
| 19 | 13 51 | 37 41 | 66 4  | 99 8   | 133 51 | 167 46 |
| 20 | 14 36 | 38 33 | 67 6  | 100 17 | 134 59 | 168 53 |
| 21 | 15 21 | 39 25 | 68 9  | 101 26 | 136 8  | 170 0  |
| 22 | 16 6  | 40 17 | 69 12 | 102 35 | 137 17 | 171 7  |
| 23 | 16 51 | 41 10 | 70 15 | 103 44 | 138 26 | 172 14 |
| 24 | 17 36 | 42 3  | 71 18 | 104 53 | 139 35 | 173 21 |
| 25 | 18 22 | 42 56 | 72 22 | 106 3  | 140 42 | 174 27 |
| 26 | 19 8  | 43 50 | 73 26 | 107 12 | 141 52 | 175 34 |
| 27 | 19 54 | 44 44 | 74 30 | 108 22 | 143 0  | 176 41 |
| 28 | 20 40 | 45 38 | 75 35 | 109 32 | 144 8  | 177 47 |
| 29 | 21 26 | 46 33 | 76 40 | 110 42 | 145 16 | 178 54 |
| 30 | 22 12 | 47 28 | 77 45 | 111 52 | 146 24 | 180 0  |



Ad latitudinem .26. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 213 36 | 248 8  | 282 15 | 312 32 | 337 48 |
| 1  | 181 6  | 214 44 | 249 18 | 283 20 | 313 27 | 338 34 |
| 2  | 182 13 | 215 52 | 250 28 | 284 25 | 314 22 | 339 20 |
| 3  | 183 19 | 217 0  | 251 38 | 285 30 | 315 16 | 340 6  |
| 4  | 184 26 | 218 8  | 252 48 | 286 34 | 316 10 | 340 52 |
| 5  | 185 33 | 219 17 | 253 57 | 287 38 | 317 4  | 341 38 |
| 6  | 186 39 | 220 25 | 255 7  | 288 42 | 317 57 | 342 24 |
| 7  | 187 46 | 221 34 | 256 16 | 289 45 | 318 50 | 343 9  |
| 8  | 188 53 | 222 43 | 257 15 | 290 48 | 319 43 | 343 54 |
| 9  | 190 0  | 223 52 | 258 34 | 291 51 | 320 35 | 344 39 |
| 10 | 191 7  | 225 1  | 259 43 | 292 54 | 321 27 | 345 24 |
| 11 | 192 14 | 226 9  | 260 52 | 293 56 | 322 19 | 346 9  |
| 12 | 193 21 | 227 18 | 262 1  | 294 58 | 323 10 | 346 54 |
| 13 | 194 28 | 228 27 | 263 10 | 296 0  | 324 1  | 347 38 |
| 14 | 195 35 | 229 36 | 264 19 | 297 1  | 324 52 | 348 22 |
| 15 | 196 42 | 230 45 | 265 28 | 298 2  | 325 43 | 349 6  |
| 16 | 197 49 | 231 54 | 266 36 | 299 2  | 326 33 | 349 50 |
| 17 | 198 58 | 233 4  | 267 44 | 300 2  | 327 23 | 350 34 |
| 18 | 200 3  | 234 13 | 268 52 | 301 2  | 328 13 | 351 18 |
| 19 | 201 10 | 235 23 | 270 0  | 302 2  | 329 2  | 352 2  |
| 20 | 202 18 | 236 33 | 271 8  | 303 1  | 329 51 | 352 45 |
| 21 | 203 25 | 237 42 | 272 16 | 304 0  | 330 40 | 353 29 |
| 22 | 204 33 | 238 51 | 273 23 | 304 58 | 331 29 | 354 13 |
| 23 | 205 40 | 240 1  | 274 30 | 305 58 | 332 17 | 354 56 |
| 24 | 206 48 | 241 10 | 275 37 | 306 54 | 333 5  | 355 40 |
| 25 | 207 56 | 242 20 | 276 44 | 307 51 | 333 53 | 356 23 |
| 26 | 209 4  | 243 29 | 277 51 | 308 48 | 334 40 | 357 7  |
| 27 | 210 12 | 244 39 | 278 57 | 309 44 | 335 27 | 357 50 |
| 28 | 211 20 | 245 48 | 280 3  | 310 40 | 336 14 | 358 34 |
| 29 | 212 28 | 246 58 | 281 9  | 311 36 | 337 1  | 359 17 |
| 30 | 213 36 | 248 8  | 282 15 | 312 32 | 337 48 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | V     | 8     | II    | E      | Ω      | up     |
|----|-------|-------|-------|--------|--------|--------|
| S  | S m   | S m   | S m   | S m    | S m    | S m    |
| 0  | 0 0   | 21 57 | 47 0  | 77 12  | 111 24 | 146 9  |
| 1  | 0 42  | 22 43 | 47 55 | 78 18  | 112 34 | 147 18 |
| 2  | 1 25  | 23 29 | 48 51 | 79 24  | 113 44 | 148 26 |
| 3  | 2 8   | 24 16 | 49 47 | 80 30  | 114 54 | 149 35 |
| 4  | 2 51  | 25 3  | 50 43 | 81 36  | 116 4  | 150 43 |
| 5  | 3 34  | 25 50 | 51 40 | 82 43  | 117 13 | 151 51 |
| 6  | 4 17  | 26 37 | 52 37 | 83 50  | 118 23 | 153 0  |
| 7  | 5 0   | 27 25 | 53 34 | 84 57  | 119 33 | 154 8  |
| 8  | 5 43  | 28 13 | 54 32 | 86 4   | 120 43 | 155 16 |
| 9  | 6 26  | 29 1  | 55 30 | 87 11  | 121 53 | 156 24 |
| 10 | 7 9   | 29 49 | 56 28 | 88 19  | 123 3  | 157 32 |
| 11 | 7 52  | 30 37 | 57 27 | 89 27  | 124 13 | 158 40 |
| 12 | 8 35  | 31 26 | 58 26 | 90 35  | 125 23 | 159 48 |
| 13 | 9 19  | 32 15 | 59 26 | 91 43  | 126 33 | 160 55 |
| 14 | 10 2  | 33 4  | 60 26 | 92 51  | 127 42 | 162 3  |
| 15 | 10 46 | 33 54 | 61 26 | 94 0   | 128 52 | 163 10 |
| 16 | 11 30 | 34 44 | 62 27 | 95 9   | 130 2  | 164 18 |
| 17 | 12 14 | 35 35 | 63 28 | 96 18  | 131 11 | 165 25 |
| 18 | 12 58 | 36 26 | 64 29 | 97 27  | 132 21 | 166 33 |
| 19 | 13 42 | 37 17 | 65 31 | 98 36  | 133 30 | 167 40 |
| 20 | 14 26 | 38 9  | 66 33 | 99 46  | 134 39 | 168 47 |
| 21 | 15 10 | 39 1  | 67 36 | 100 54 | 135 49 | 169 55 |
| 22 | 15 54 | 39 53 | 68 39 | 102 5  | 136 58 | 171 2  |
| 23 | 16 39 | 40 45 | 69 42 | 103 14 | 138 8  | 172 10 |
| 24 | 17 24 | 41 37 | 70 45 | 104 24 | 139 17 | 173 17 |
| 25 | 18 9  | 42 29 | 71 49 | 105 44 | 140 26 | 174 24 |
| 26 | 18 54 | 43 22 | 72 53 | 106 44 | 141 35 | 175 32 |
| 27 | 19 39 | 44 16 | 73 57 | 107 54 | 142 44 | 176 39 |
| 28 | 20 25 | 45 10 | 75 2  | 109 4  | 143 52 | 177 46 |
| 29 | 21 11 | 46 5  | 76 7  | 110 14 | 145 1  | 178 53 |
| 30 | 21 57 | 47 0  | 77 12 | 111 24 | 146 9  | 180 0  |



Ad latitudinem .27. Graduum.

|    | ♌      | ♍      | ♎      | ♏      | ♐      | ♑      | ♒ |
|----|--------|--------|--------|--------|--------|--------|---|
| ♈  | ♌      | ♍      | ♎      | ♏      | ♐      | ♑      | ♒ |
| 0  | 180 0  | 213 51 | 248 36 | 282 48 | 313 0  | 338 3  |   |
| 1  | 181 7  | 214 59 | 249 46 | 283 53 | 313 55 | 338 49 |   |
| 2  | 182 14 | 216 8  | 250 56 | 284 58 | 314 50 | 339 35 |   |
| 3  | 183 21 | 217 16 | 252 6  | 286 3  | 315 44 | 340 21 |   |
| 4  | 184 28 | 218 25 | 253 16 | 287 7  | 316 38 | 341 6  |   |
| 5  | 185 36 | 219 34 | 254 26 | 288 11 | 317 31 | 341 51 |   |
| 6  | 186 43 | 220 43 | 255 36 | 289 15 | 318 23 | 342 36 |   |
| 7  | 187 50 | 221 52 | 256 46 | 290 18 | 319 15 | 343 21 |   |
| 8  | 188 58 | 223 2  | 257 55 | 291 21 | 320 7  | 344 6  |   |
| 9  | 190 5  | 224 11 | 259 5  | 292 24 | 320 59 | 344 50 |   |
| 10 | 191 13 | 225 21 | 260 14 | 293 27 | 321 51 | 345 34 |   |
| 11 | 192 20 | 226 30 | 261 24 | 294 29 | 322 43 | 346 18 |   |
| 12 | 193 27 | 227 39 | 262 33 | 295 31 | 323 34 | 347 2  |   |
| 13 | 194 35 | 228 49 | 263 42 | 296 32 | 324 25 | 347 46 |   |
| 14 | 195 42 | 229 58 | 264 51 | 297 33 | 325 16 | 348 30 |   |
| 15 | 196 50 | 231 8  | 266 0  | 298 34 | 326 6  | 349 14 |   |
| 16 | 197 57 | 232 17 | 267 9  | 299 34 | 326 58 | 349 58 |   |
| 17 | 199 5  | 233 27 | 268 17 | 300 34 | 327 45 | 350 41 |   |
| 18 | 200 12 | 234 37 | 269 25 | 301 34 | 328 34 | 351 25 |   |
| 19 | 201 20 | 235 47 | 270 33 | 302 33 | 329 23 | 352 8  |   |
| 20 | 202 28 | 236 57 | 271 41 | 303 32 | 330 11 | 352 51 |   |
| 21 | 203 36 | 238 7  | 272 49 | 304 30 | 330 59 | 353 34 |   |
| 22 | 204 44 | 239 17 | 273 56 | 305 28 | 331 47 | 354 17 |   |
| 23 | 205 52 | 240 27 | 275 3  | 306 26 | 332 35 | 355 0  |   |
| 24 | 207 0  | 241 37 | 276 10 | 307 23 | 333 23 | 355 43 |   |
| 25 | 208 9  | 242 47 | 277 17 | 308 20 | 334 10 | 356 26 |   |
| 26 | 209 17 | 243 56 | 278 24 | 309 17 | 334 57 | 357 9  |   |
| 27 | 210 25 | 245 6  | 279 30 | 310 13 | 335 44 | 357 52 |   |
| 28 | 211 34 | 246 16 | 280 36 | 311 9  | 336 31 | 358 35 |   |
| 29 | 212 42 | 247 26 | 281 42 | 312 5  | 337 17 | 359 18 |   |
| 30 | 213 51 | 248 36 | 282 48 | 313 0  | 338 3  | 360 0  |   |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ι     | ϖ      | ♌      | ♍      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 21 41 | 46 31 | 76 38  | 110 55 | 145 53 |
| 1  | 0 42  | 22 27 | 47 26 | 77 44  | 112 6  | 147 2  |
| 2  | 1 24  | 23 13 | 48 21 | 78 50  | 113 16 | 148 11 |
| 3  | 2 6   | 23 59 | 49 17 | 79 56  | 114 27 | 149 20 |
| 4  | 2 48  | 24 45 | 50 13 | 81 2   | 115 37 | 150 29 |
| 5  | 3 31  | 25 31 | 51 9  | 82 9   | 116 47 | 151 38 |
| 6  | 4 13  | 26 18 | 52 6  | 83 16  | 117 58 | 152 47 |
| 7  | 4 56  | 27 5  | 53 3  | 84 23  | 119 8  | 153 56 |
| 8  | 5 38  | 27 53 | 54 0  | 85 31  | 120 18 | 155 4  |
| 9  | 6 21  | 28 41 | 54 58 | 86 38  | 121 28 | 156 13 |
| 10 | 7 4   | 29 29 | 55 56 | 87 46  | 122 38 | 157 21 |
| 11 | 7 46  | 30 17 | 56 55 | 88 54  | 123 49 | 158 30 |
| 12 | 8 29  | 31 5  | 57 54 | 90 2   | 124 59 | 159 38 |
| 13 | 9 12  | 31 54 | 58 54 | 91 11  | 126 10 | 160 46 |
| 14 | 9 55  | 32 43 | 59 54 | 92 19  | 127 20 | 161 54 |
| 15 | 10 38 | 33 32 | 60 54 | 93 28  | 128 30 | 163 2  |
| 16 | 11 21 | 34 22 | 61 55 | 94 37  | 129 40 | 164 10 |
| 17 | 12 4  | 35 12 | 62 56 | 95 46  | 130 50 | 165 18 |
| 18 | 12 48 | 36 2  | 63 57 | 96 55  | 132 0  | 166 26 |
| 19 | 13 31 | 36 53 | 64 58 | 98 4   | 133 10 | 167 34 |
| 20 | 14 15 | 37 44 | 66 0  | 99 14  | 134 19 | 168 42 |
| 21 | 14 59 | 38 35 | 67 2  | 100 23 | 135 29 | 169 50 |
| 22 | 15 43 | 39 27 | 68 5  | 101 33 | 136 39 | 170 58 |
| 23 | 16 27 | 40 19 | 69 8  | 102 43 | 137 48 | 172 6  |
| 24 | 17 11 | 41 11 | 70 11 | 103 53 | 138 58 | 173 14 |
| 25 | 17 56 | 42 3  | 71 15 | 105 3  | 140 7  | 174 21 |
| 26 | 18 41 | 42 56 | 72 19 | 106 13 | 141 17 | 175 29 |
| 27 | 19 26 | 43 49 | 73 23 | 107 23 | 142 26 | 176 37 |
| 28 | 20 11 | 44 43 | 74 28 | 108 34 | 143 35 | 177 45 |
| 29 | 20 58 | 45 37 | 75 33 | 109 44 | 144 44 | 178 53 |
| 30 | 21 41 | 46 31 | 76 38 | 110 55 | 145 53 | 180 0  |



Ed latitudinem .28. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 214 7  | 249 5  | 283 22 | 313 29 | 338 19 |
| 1  | 181 7  | 215 16 | 250 16 | 284 27 | 314 23 | 339 4  |
| 2  | 182 15 | 216 25 | 251 26 | 285 32 | 315 17 | 339 49 |
| 3  | 183 23 | 217 34 | 252 37 | 286 36 | 316 11 | 340 34 |
| 4  | 184 31 | 218 43 | 253 47 | 287 41 | 317 4  | 341 19 |
| 5  | 185 39 | 219 53 | 254 57 | 288 45 | 317 57 | 342 4  |
| 6  | 186 46 | 221 2  | 256 7  | 289 49 | 318 49 | 342 49 |
| 7  | 187 54 | 222 12 | 257 17 | 290 52 | 319 42 | 343 33 |
| 8  | 189 2  | 223 21 | 258 27 | 291 55 | 320 33 | 344 17 |
| 9  | 190 10 | 224 31 | 259 37 | 292 58 | 321 25 | 345 1  |
| 10 | 191 18 | 225 41 | 260 46 | 294 0  | 322 16 | 345 45 |
| 11 | 192 25 | 226 50 | 261 56 | 295 2  | 323 7  | 346 29 |
| 12 | 193 34 | 228 0  | 263 3  | 296 3  | 323 58 | 347 12 |
| 13 | 194 42 | 229 10 | 264 14 | 297 4  | 324 48 | 347 56 |
| 14 | 195 50 | 230 20 | 265 23 | 298 5  | 324 38 | 348 39 |
| 15 | 196 58 | 231 30 | 266 32 | 299 6  | 326 28 | 349 22 |
| 16 | 198 6  | 232 40 | 267 41 | 300 6  | 327 18 | 350 5  |
| 17 | 199 14 | 233 50 | 268 49 | 301 6  | 328 6  | 350 48 |
| 18 | 200 22 | 235 1  | 269 58 | 302 6  | 328 55 | 351 31 |
| 19 | 201 30 | 236 11 | 271 6  | 303 5  | 329 43 | 352 14 |
| 20 | 202 39 | 237 22 | 272 14 | 304 4  | 330 31 | 352 56 |
| 21 | 203 47 | 238 32 | 273 22 | 305 2  | 331 19 | 353 39 |
| 22 | 204 56 | 239 42 | 274 29 | 306 0  | 332 7  | 354 22 |
| 23 | 206 4  | 240 52 | 275 37 | 306 57 | 332 55 | 355 4  |
| 24 | 206 13 | 242 2  | 276 44 | 307 54 | 333 42 | 355 47 |
| 25 | 208 22 | 243 13 | 277 51 | 308 51 | 334 40 | 356 29 |
| 26 | 209 31 | 244 23 | 278 58 | 309 47 | 335 15 | 357 12 |
| 27 | 210 40 | 245 33 | 280 4  | 310 43 | 336 1  | 357 54 |
| 28 | 211 49 | 246 44 | 281 10 | 311 39 | 336 47 | 358 37 |
| 29 | 212 58 | 247 54 | 282 16 | 312 34 | 337 33 | 359 18 |
| 30 | 214 7  | 249 5  | 283 22 | 313 29 | 338 19 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 21 25 | 46 2  | 76 3   | 110 26 | 145 37 |
| 1  | 0 41  | 22 10 | 46 57 | 77 9   | 111 37 | 146 47 |
| 2  | 1 23  | 22 55 | 47 52 | 78 15  | 112 48 | 147 57 |
| 3  | 2 5   | 23 41 | 48 47 | 79 21  | 113 58 | 149 6  |
| 4  | 2 47  | 24 27 | 49 43 | 80 27  | 115 9  | 150 16 |
| 5  | 3 29  | 25 13 | 50 39 | 81 34  | 116 19 | 151 25 |
| 6  | 4 11  | 26 0  | 51 35 | 82 41  | 117 30 | 152 34 |
| 7  | 4 53  | 26 47 | 52 32 | 83 49  | 118 41 | 153 43 |
| 8  | 5 35  | 27 34 | 53 29 | 84 56  | 119 51 | 154 52 |
| 9  | 6 17  | 28 21 | 54 26 | 86 4   | 121 2  | 156 1  |
| 10 | 6 59  | 29 8  | 55 24 | 87 12  | 122 12 | 157 10 |
| 11 | 7 41  | 29 55 | 56 22 | 88 20  | 123 23 | 158 19 |
| 12 | 8 23  | 30 43 | 57 21 | 89 28  | 124 36 | 159 28 |
| 13 | 9 5   | 31 31 | 58 20 | 90 37  | 125 45 | 160 37 |
| 14 | 9 47  | 32 19 | 59 20 | 91 45  | 126 56 | 161 46 |
| 15 | 10 30 | 33 8  | 60 20 | 92 54  | 128 6  | 162 54 |
| 16 | 11 12 | 33 57 | 61 20 | 94 3   | 129 17 | 164 3  |
| 17 | 11 55 | 34 47 | 62 21 | 95 13  | 130 27 | 165 12 |
| 18 | 12 38 | 35 37 | 63 22 | 96 22  | 131 38 | 166 20 |
| 19 | 13 21 | 36 27 | 64 24 | 97 32  | 132 48 | 167 29 |
| 20 | 14 4  | 37 18 | 65 26 | 98 42  | 133 58 | 168 37 |
| 21 | 14 47 | 38 9  | 66 28 | 99 52  | 135 9  | 169 46 |
| 22 | 15 31 | 39 0  | 67 31 | 101 2  | 136 19 | 170 54 |
| 23 | 16 15 | 39 51 | 68 34 | 102 12 | 137 29 | 172 3  |
| 24 | 16 59 | 40 43 | 69 37 | 103 22 | 138 39 | 173 11 |
| 25 | 17 43 | 41 35 | 70 40 | 104 32 | 139 49 | 174 19 |
| 26 | 18 27 | 42 28 | 71 44 | 105 43 | 140 59 | 175 28 |
| 27 | 19 11 | 43 21 | 72 48 | 106 54 | 142 9  | 176 36 |
| 28 | 19 56 | 44 14 | 73 53 | 108 4  | 143 18 | 177 44 |
| 29 | 20 40 | 45 8  | 74 58 | 109 15 | 144 28 | 178 52 |
| 30 | 21 25 | 46 2  | 76 3  | 110 26 | 145 37 | 180 0  |



Ad latitudinem .29. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 214 23 | 249 34 | 283 57 | 313 58 | 338 35 |
| 1  | 181 8  | 215 32 | 250 45 | 285 2  | 314 52 | 339 20 |
| 2  | 182 16 | 216 42 | 251 56 | 286 7  | 315 46 | 340 4  |
| 3  | 183 24 | 217 51 | 253 6  | 287 12 | 316 39 | 340 49 |
| 4  | 184 32 | 219 1  | 254 17 | 288 16 | 317 32 | 341 23 |
| 5  | 185 41 | 220 11 | 255 27 | 289 20 | 318 25 | 342 17 |
| 6  | 186 49 | 221 21 | 256 38 | 290 23 | 319 17 | 343 1  |
| 7  | 187 57 | 222 31 | 257 48 | 291 26 | 320 9  | 343 45 |
| 8  | 189 6  | 223 41 | 258 58 | 292 29 | 321 0  | 344 20 |
| 9  | 190 14 | 224 51 | 260 8  | 293 32 | 321 51 | 345 13 |
| 10 | 191 23 | 226 2  | 261 18 | 294 34 | 322 42 | 345 56 |
| 11 | 192 31 | 227 12 | 262 28 | 295 36 | 323 33 | 346 39 |
| 12 | 193 40 | 228 22 | 263 38 | 296 38 | 324 23 | 347 22 |
| 13 | 194 48 | 229 33 | 264 47 | 297 39 | 325 13 | 348 5  |
| 14 | 195 57 | 230 43 | 265 57 | 298 40 | 326 3  | 348 48 |
| 15 | 197 6  | 231 54 | 267 6  | 299 40 | 326 52 | 349 30 |
| 16 | 198 14 | 233 4  | 268 15 | 300 40 | 327 41 | 350 13 |
| 17 | 199 23 | 234 15 | 269 23 | 301 40 | 328 29 | 350 55 |
| 18 | 200 32 | 235 26 | 270 32 | 302 39 | 329 17 | 351 37 |
| 19 | 201 41 | 236 37 | 271 40 | 303 38 | 330 5  | 352 19 |
| 20 | 202 50 | 237 48 | 272 48 | 304 36 | 330 52 | 353 1  |
| 21 | 203 59 | 238 58 | 273 56 | 305 34 | 331 39 | 353 43 |
| 22 | 205 8  | 240 9  | 275 4  | 306 31 | 332 26 | 354 25 |
| 23 | 206 17 | 241 19 | 276 11 | 307 28 | 333 13 | 355 7  |
| 24 | 207 26 | 242 30 | 277 19 | 308 25 | 334 0  | 355 49 |
| 25 | 208 35 | 243 41 | 278 26 | 309 21 | 334 47 | 356 31 |
| 26 | 209 44 | 244 51 | 279 33 | 310 17 | 335 33 | 357 23 |
| 27 | 210 54 | 246 2  | 280 39 | 311 13 | 336 19 | 357 55 |
| 28 | 212 3  | 247 12 | 281 45 | 312 8  | 337 5  | 358 37 |
| 29 | 213 13 | 248 23 | 282 51 | 313 3  | 337 50 | 359 19 |
| 30 | 214 23 | 249 34 | 283 57 | 313 58 | 338 35 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | ♈     | ♉     | ♊     | ♋      | ♌      | ♍      |
|----|-------|-------|-------|--------|--------|--------|
| ♈  | ♈ m   | ♉ m   | ♊ m   | ♋ m    | ♌ m    | ♍ m    |
| 0  | 0 0   | 21 9  | 45 32 | 75 28  | 109 56 | 145 21 |
| 1  | 0 41  | 21 54 | 46 27 | 76 34  | 111 7  | 146 31 |
| 2  | 1 22  | 22 39 | 47 22 | 77 40  | 112 18 | 147 41 |
| 3  | 2 3   | 23 24 | 48 17 | 78 46  | 113 29 | 148 51 |
| 4  | 2 44  | 24 9  | 49 12 | 79 52  | 114 40 | 150 1  |
| 5  | 3 26  | 24 54 | 50 7  | 80 59  | 115 51 | 151 11 |
| 6  | 4 7   | 25 50 | 51 3  | 82 6   | 117 2  | 152 21 |
| 7  | 4 48  | 26 27 | 52 0  | 83 14  | 118 13 | 153 31 |
| 8  | 5 30  | 27 13 | 52 57 | 84 21  | 119 24 | 154 41 |
| 9  | 6 11  | 28 0  | 53 55 | 85 29  | 120 35 | 155 51 |
| 10 | 6 53  | 28 47 | 54 51 | 86 37  | 121 47 | 157 0  |
| 11 | 7 34  | 29 34 | 55 50 | 87 45  | 122 58 | 158 10 |
| 12 | 8 16  | 30 22 | 56 49 | 88 54  | 124 9  | 159 19 |
| 13 | 8 58  | 31 9  | 57 48 | 90 2   | 125 21 | 160 28 |
| 14 | 9 40  | 31 57 | 58 47 | 91 11  | 126 32 | 161 37 |
| 15 | 10 22 | 32 45 | 59 46 | 92 20  | 127 43 | 162 46 |
| 16 | 11 4  | 33 34 | 60 47 | 93 29  | 128 54 | 163 55 |
| 17 | 11 46 | 34 24 | 61 48 | 94 39  | 130 5  | 165 4  |
| 18 | 12 29 | 35 13 | 62 49 | 95 49  | 131 16 | 166 13 |
| 19 | 13 11 | 36 3  | 73 50 | 96 59  | 132 27 | 167 22 |
| 20 | 13 54 | 36 53 | 64 51 | 98 9   | 133 37 | 168 31 |
| 21 | 14 37 | 37 43 | 65 53 | 99 19  | 134 48 | 169 40 |
| 22 | 15 20 | 38 34 | 66 56 | 100 29 | 135 59 | 170 49 |
| 23 | 16 3  | 39 25 | 67 59 | 101 40 | 137 9  | 171 58 |
| 24 | 16 46 | 40 16 | 69 2  | 102 50 | 138 20 | 173 7  |
| 25 | 17 29 | 41 7  | 70 5  | 104 1  | 139 30 | 174 16 |
| 26 | 18 13 | 42 0  | 71 9  | 105 12 | 140 41 | 175 25 |
| 27 | 18 57 | 42 53 | 72 14 | 106 23 | 141 51 | 176 34 |
| 28 | 19 41 | 43 46 | 73 18 | 107 34 | 143 1  | 177 43 |
| 29 | 20 25 | 44 39 | 74 23 | 108 45 | 144 11 | 178 52 |
| 30 | 21 9  | 45 32 | 75 28 | 109 56 | 145 21 | 180 0  |



Ad latitudinem .30. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 214 39 | 250 4  | 284 32 | 314 28 | 338 51 |
| 1  | 181 8  | 215 49 | 251 15 | 285 37 | 315 21 | 339 35 |
| 2  | 182 17 | 216 59 | 252 26 | 286 42 | 316 14 | 340 19 |
| 3  | 183 26 | 218 9  | 253 37 | 287 46 | 317 7  | 341 3  |
| 4  | 184 35 | 219 19 | 254 48 | 288 51 | 318 0  | 341 47 |
| 5  | 185 44 | 220 30 | 255 59 | 289 55 | 318 53 | 342 31 |
| 6  | 186 53 | 221 40 | 257 10 | 290 58 | 319 44 | 343 14 |
| 7  | 188 2  | 222 51 | 258 20 | 292 1  | 320 35 | 343 57 |
| 8  | 189 11 | 224 1  | 259 31 | 293 4  | 321 26 | 344 40 |
| 9  | 190 20 | 225 12 | 260 41 | 294 7  | 322 17 | 345 23 |
| 10 | 191 29 | 226 23 | 261 51 | 295 9  | 323 7  | 346 6  |
| 11 | 192 38 | 227 33 | 263 1  | 296 10 | 323 57 | 346 49 |
| 12 | 193 47 | 228 44 | 264 11 | 297 11 | 324 47 | 347 31 |
| 13 | 194 56 | 229 55 | 265 21 | 298 12 | 325 36 | 348 14 |
| 14 | 196 5  | 231 6  | 266 31 | 299 13 | 326 26 | 348 56 |
| 15 | 197 14 | 232 17 | 267 40 | 300 14 | 327 15 | 349 38 |
| 16 | 198 23 | 233 28 | 268 49 | 301 15 | 328 3  | 350 20 |
| 17 | 199 32 | 234 39 | 269 58 | 302 12 | 328 51 | 351 2  |
| 18 | 200 41 | 235 51 | 271 6  | 303 11 | 329 38 | 351 44 |
| 19 | 201 50 | 237 2  | 272 15 | 304 10 | 330 26 | 352 26 |
| 20 | 203 0  | 238 13 | 273 23 | 305 9  | 331 13 | 353 7  |
| 21 | 204 9  | 239 25 | 274 31 | 306 6  | 332 0  | 353 49 |
| 22 | 205 19 | 240 36 | 275 39 | 307 3  | 332 47 | 354 30 |
| 23 | 206 29 | 241 47 | 276 46 | 308 0  | 333 33 | 355 12 |
| 24 | 207 39 | 242 58 | 277 54 | 309 57 | 334 20 | 355 53 |
| 25 | 208 49 | 244 9  | 279 1  | 309 53 | 335 6  | 356 34 |
| 26 | 209 59 | 245 20 | 280 8  | 310 48 | 335 51 | 357 16 |
| 27 | 211 9  | 246 31 | 281 14 | 311 43 | 336 36 | 357 57 |
| 28 | 212 19 | 247 42 | 282 20 | 312 38 | 337 21 | 358 38 |
| 29 | 213 29 | 248 53 | 283 26 | 313 33 | 338 6  | 359 19 |
| 30 | 214 39 | 250 4  | 284 32 | 314 28 | 338 51 | 360 0  |

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# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 20 53 | 45 2  | 74 51  | 109 26 | 145 5  |
| 1  | 0 40  | 21 37 | 45 56 | 75 56  | 110 37 | 146 16 |
| 2  | 1 22  | 22 21 | 46 50 | 77 2   | 111 48 | 147 26 |
| 3  | 2 1   | 23 5  | 47 45 | 78 8   | 113 0  | 148 37 |
| 4  | 2 42  | 23 50 | 48 40 | 79 15  | 114 11 | 149 47 |
| 5  | 3 23  | 24 35 | 49 35 | 80 22  | 115 23 | 150 57 |
| 6  | 4 4   | 25 20 | 50 31 | 81 29  | 116 34 | 152 8  |
| 7  | 4 45  | 26 6  | 51 27 | 82 37  | 117 45 | 153 18 |
| 8  | 5 26  | 26 52 | 52 24 | 83 45  | 118 57 | 154 28 |
| 9  | 6 7   | 27 38 | 53 21 | 84 53  | 120 8  | 155 38 |
| 10 | 6 48  | 28 25 | 54 18 | 86 1   | 121 20 | 156 48 |
| 11 | 7 29  | 29 12 | 55 16 | 87 10  | 122 31 | 157 58 |
| 12 | 8 10  | 29 59 | 56 14 | 88 19  | 123 43 | 159 8  |
| 13 | 8 51  | 30 46 | 57 13 | 89 28  | 124 55 | 160 18 |
| 14 | 9 32  | 31 33 | 58 12 | 90 37  | 126 7  | 161 28 |
| 15 | 10 14 | 32 21 | 59 12 | 91 46  | 127 19 | 162 38 |
| 16 | 10 55 | 33 9  | 60 12 | 92 56  | 128 31 | 163 48 |
| 17 | 11 37 | 33 58 | 61 12 | 94 6   | 129 42 | 164 58 |
| 18 | 12 18 | 34 47 | 62 13 | 95 16  | 130 53 | 166 7  |
| 19 | 13 0  | 35 36 | 63 14 | 96 26  | 132 4  | 167 17 |
| 20 | 13 42 | 36 26 | 64 15 | 97 36  | 133 15 | 168 26 |
| 21 | 14 24 | 37 16 | 65 17 | 98 46  | 134 27 | 169 36 |
| 22 | 15 7  | 38 6  | 66 19 | 99 57  | 135 38 | 170 45 |
| 23 | 15 49 | 38 57 | 67 22 | 100 7  | 136 49 | 171 55 |
| 24 | 16 32 | 39 48 | 68 35 | 102 18 | 138 0  | 173 4  |
| 25 | 17 15 | 40 39 | 69 28 | 103 29 | 139 11 | 174 13 |
| 26 | 17 58 | 41 31 | 70 32 | 104 40 | 140 22 | 175 23 |
| 27 | 18 42 | 42 23 | 71 36 | 105 51 | 141 33 | 176 32 |
| 28 | 19 25 | 43 16 | 72 41 | 107 3  | 142 46 | 177 42 |
| 29 | 20 9  | 44 9  | 73 46 | 108 14 | 143 55 | 178 51 |
| 30 | 20 53 | 45 2  | 74 51 | 109 26 | 145 5  | 180 0  |



Ad latitudinem .31. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎   |
|----|--------|--------|--------|--------|--------|--------|-----|
| S  | S m    | S m    | S m    | S m    | S m    | S m    | S m |
| 0  | 180 0  | 214 55 | 250 34 | 285 9  | 314 58 | 339 7  |     |
| 1  | 181 9  | 216 5  | 251 46 | 286 14 | 315 51 | 339 51 |     |
| 2  | 182 18 | 217 16 | 252 57 | 287 19 | 316 44 | 340 35 |     |
| 3  | 183 28 | 218 27 | 254 9  | 288 24 | 317 37 | 341 18 |     |
| 4  | 184 37 | 219 38 | 255 20 | 289 28 | 318 29 | 342 2  |     |
| 5  | 185 47 | 220 49 | 256 31 | 290 32 | 319 21 | 342 45 |     |
| 6  | 186 56 | 222 0  | 257 42 | 291 35 | 320 12 | 343 28 |     |
| 7  | 188 5  | 223 11 | 258 53 | 292 38 | 321 3  | 344 11 |     |
| 8  | 189 15 | 224 22 | 260 3  | 293 41 | 321 54 | 344 53 |     |
| 9  | 190 24 | 225 33 | 261 14 | 294 43 | 322 44 | 345 36 |     |
| 10 | 191 34 | 226 45 | 262 24 | 295 45 | 323 34 | 346 18 |     |
| 11 | 192 43 | 227 56 | 263 34 | 296 46 | 324 24 | 347 0  |     |
| 12 | 193 53 | 229 7  | 264 44 | 297 47 | 325 13 | 347 42 |     |
| 13 | 195 2  | 230 18 | 265 54 | 298 48 | 326 2  | 348 23 |     |
| 14 | 196 12 | 231 29 | 267 4  | 299 48 | 326 51 | 349 5  |     |
| 15 | 197 22 | 232 41 | 268 14 | 300 48 | 327 39 | 349 46 |     |
| 16 | 198 32 | 233 53 | 269 23 | 301 48 | 328 27 | 350 28 |     |
| 17 | 199 42 | 235 5  | 270 32 | 302 47 | 329 14 | 351 9  |     |
| 18 | 200 52 | 236 17 | 271 41 | 303 46 | 330 1  | 351 50 |     |
| 19 | 202 2  | 237 29 | 272 50 | 304 44 | 330 48 | 352 31 |     |
| 20 | 203 12 | 238 40 | 273 59 | 305 42 | 331 35 | 353 12 |     |
| 21 | 204 22 | 239 52 | 275 7  | 306 39 | 332 22 | 353 53 |     |
| 22 | 205 32 | 241 3  | 276 15 | 307 36 | 333 8  | 354 34 |     |
| 23 | 206 42 | 242 15 | 277 23 | 308 33 | 333 54 | 355 15 |     |
| 24 | 207 52 | 243 26 | 278 31 | 309 29 | 334 40 | 355 56 |     |
| 25 | 209 3  | 244 37 | 279 38 | 310 25 | 335 25 | 356 37 |     |
| 26 | 210 13 | 245 49 | 280 45 | 311 20 | 336 10 | 357 18 |     |
| 27 | 211 23 | 247 0  | 281 52 | 312 15 | 336 55 | 357 59 |     |
| 28 | 212 34 | 248 12 | 282 58 | 313 10 | 337 39 | 358 39 |     |
| 29 | 213 44 | 249 23 | 284 4  | 314 4  | 338 23 | 359 20 |     |
| 30 | 214 45 | 250 34 | 285 9  | 314 58 | 339 7  | 360 0  |     |

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# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | Ω      | np     |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 20 39 | 44 31 | 74 14  | 108 55 | 144 48 |
| 1  | 0 40  | 21 20 | 45 25 | 75 19  | 110 6  | 145 59 |
| 2  | 1 20  | 22 4  | 46 19 | 76 25  | 111 18 | 147 10 |
| 3  | 2 0   | 22 48 | 47 13 | 77 31  | 112 30 | 148 21 |
| 4  | 2 40  | 23 32 | 48 7  | 78 38  | 113 42 | 149 32 |
| 5  | 3 20  | 24 16 | 49 2  | 79 45  | 114 54 | 150 43 |
| 6  | 4 0   | 25 1  | 49 58 | 80 53  | 116 5  | 151 54 |
| 7  | 4 40  | 25 46 | 50 54 | 82 1   | 117 17 | 153 5  |
| 8  | 5 21  | 26 37 | 51 50 | 83 9   | 118 29 | 154 16 |
| 9  | 6 1   | 27 17 | 52 46 | 84 17  | 119 41 | 155 27 |
| 10 | 6 42  | 28 3  | 53 43 | 85 25  | 120 53 | 156 37 |
| 11 | 7 22  | 28 49 | 54 40 | 86 34  | 122 5  | 157 48 |
| 12 | 8 3   | 29 36 | 55 38 | 87 43  | 123 17 | 148 58 |
| 13 | 8 43  | 30 22 | 56 37 | 88 52  | 124 30 | 160 9  |
| 14 | 9 24  | 31 9  | 57 36 | 90 1   | 125 42 | 161 19 |
| 15 | 10 5  | 31 56 | 58 36 | 91 10  | 126 54 | 162 29 |
| 16 | 10 46 | 32 44 | 59 36 | 92 20  | 128 6  | 163 40 |
| 17 | 11 27 | 33 33 | 60 36 | 93 30  | 129 18 | 164 50 |
| 18 | 12 8  | 34 31 | 61 37 | 94 40  | 130 30 | 166 0  |
| 19 | 12 49 | 35 10 | 62 38 | 95 50  | 131 42 | 167 10 |
| 20 | 13 31 | 35 59 | 63 39 | 97 1   | 132 53 | 168 20 |
| 21 | 14 13 | 36 49 | 64 41 | 98 12  | 134 5  | 169 30 |
| 22 | 14 55 | 37 39 | 65 43 | 99 23  | 135 17 | 170 40 |
| 23 | 15 37 | 38 29 | 66 45 | 100 34 | 136 29 | 171 50 |
| 24 | 16 19 | 39 19 | 67 48 | 101 45 | 137 41 | 173 0  |
| 25 | 17 1  | 40 10 | 68 51 | 102 56 | 138 52 | 174 10 |
| 26 | 17 44 | 41 2  | 69 55 | 104 7  | 140 4  | 175 20 |
| 27 | 18 27 | 41 54 | 70 59 | 105 19 | 141 15 | 176 30 |
| 28 | 19 10 | 42 46 | 72 4  | 106 31 | 142 26 | 177 40 |
| 29 | 19 53 | 43 38 | 73 9  | 107 43 | 143 37 | 178 50 |
| 30 | 20 36 | 44 31 | 74 14 | 108 55 | 144 48 | 180 0  |



Ad latitudinem .32. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 215 12 | 251 5  | 285 46 | 315 29 | 339 24 |
| 1  | 181 10 | 216 23 | 252 17 | 286 51 | 316 22 | 340 7  |
| 2  | 182 20 | 217 34 | 253 29 | 287 56 | 317 14 | 340 50 |
| 3  | 183 30 | 218 45 | 254 41 | 289 1  | 318 8  | 341 33 |
| 4  | 184 40 | 219 56 | 255 53 | 290 5  | 318 58 | 342 16 |
| 5  | 185 50 | 221 8  | 257 4  | 291 9  | 319 50 | 342 59 |
| 6  | 187 0  | 222 19 | 258 15 | 292 12 | 320 41 | 343 41 |
| 7  | 188 10 | 223 31 | 259 26 | 293 15 | 321 31 | 344 23 |
| 8  | 189 20 | 224 43 | 260 37 | 294 17 | 322 21 | 345 5  |
| 9  | 190 30 | 225 55 | 261 48 | 295 19 | 323 11 | 345 47 |
| 10 | 191 40 | 227 7  | 262 59 | 296 21 | 324 1  | 346 29 |
| 11 | 192 50 | 228 18 | 264 10 | 297 22 | 324 50 | 347 11 |
| 12 | 194 0  | 229 30 | 265 20 | 298 23 | 325 39 | 347 52 |
| 13 | 195 10 | 230 42 | 266 30 | 299 24 | 326 27 | 348 33 |
| 14 | 196 20 | 231 54 | 267 40 | 300 24 | 327 16 | 349 14 |
| 15 | 197 31 | 233 6  | 268 50 | 301 24 | 328 4  | 349 55 |
| 16 | 198 41 | 234 18 | 269 59 | 302 24 | 328 51 | 350 36 |
| 17 | 199 51 | 235 30 | 271 8  | 303 23 | 329 38 | 351 17 |
| 18 | 201 2  | 236 43 | 272 17 | 304 22 | 330 24 | 351 57 |
| 19 | 202 12 | 237 55 | 273 26 | 305 20 | 331 11 | 352 38 |
| 20 | 203 23 | 239 7  | 274 35 | 306 17 | 331 57 | 353 18 |
| 21 | 204 33 | 240 19 | 275 43 | 307 14 | 332 43 | 353 59 |
| 22 | 205 44 | 241 31 | 276 51 | 308 10 | 333 28 | 354 39 |
| 23 | 206 55 | 242 43 | 277 59 | 309 6  | 334 14 | 355 20 |
| 24 | 208 6  | 243 55 | 279 7  | 310 2  | 334 59 | 356 0  |
| 25 | 209 17 | 245 6  | 280 15 | 310 58 | 335 44 | 356 40 |
| 26 | 210 28 | 246 18 | 281 22 | 311 53 | 336 28 | 357 20 |
| 27 | 211 39 | 247 30 | 282 29 | 312 47 | 337 12 | 358 0  |
| 28 | 212 50 | 248 42 | 283 35 | 313 41 | 337 56 | 358 40 |
| 29 | 214 1  | 249 54 | 284 41 | 314 35 | 338 40 | 359 20 |
| 30 | 215 12 | 25 15  | 285 46 | 315 29 | 339 24 | 360 0  |

3 10 3



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | ιπ     |
|----|-------|-------|-------|--------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |
| 0  | 0 0   | 20 18 | 43 59 | 73 36  | 108 23 | 144 30 |
| 1  | 0 39  | 21 1  | 44 52 | 74 42  | 109 35 | 145 42 |
| 2  | 1 18  | 21 44 | 45 45 | 75 48  | 110 47 | 146 54 |
| 3  | 1 58  | 22 27 | 46 39 | 76 54  | 111 59 | 148 5  |
| 4  | 2 37  | 23 11 | 47 33 | 78 0   | 113 11 | 149 17 |
| 5  | 3 17  | 23 55 | 48 28 | 79 7   | 114 24 | 150 28 |
| 6  | 3 56  | 24 40 | 49 23 | 80 15  | 115 36 | 151 40 |
| 7  | 4 36  | 25 25 | 50 19 | 81 23  | 116 48 | 152 51 |
| 8  | 5 16  | 26 10 | 51 15 | 82 31  | 118 1  | 154 3  |
| 9  | 5 56  | 26 55 | 52 11 | 83 39  | 119 13 | 155 14 |
| 10 | 6 36  | 27 40 | 53 8  | 84 47  | 120 26 | 156 25 |
| 11 | 7 16  | 28 26 | 54 5  | 85 56  | 121 38 | 157 36 |
| 12 | 7 56  | 29 12 | 55 3  | 87 4   | 122 51 | 158 47 |
| 13 | 8 36  | 29 58 | 56 1  | 88 15  | 124 3  | 159 58 |
| 14 | 9 16  | 30 44 | 57 0  | 89 23  | 125 16 | 161 9  |
| 15 | 9 56  | 31 31 | 57 59 | 90 33  | 126 29 | 162 20 |
| 16 | 10 36 | 32 18 | 58 59 | 91 43  | 127 42 | 163 31 |
| 17 | 11 17 | 33 6  | 59 59 | 92 53  | 128 54 | 164 42 |
| 18 | 11 57 | 33 54 | 60 59 | 94 5   | 130 6  | 165 53 |
| 19 | 12 38 | 34 43 | 62 0  | 95 14  | 131 18 | 167 4  |
| 20 | 13 19 | 35 32 | 63 1  | 96 26  | 132 30 | 168 14 |
| 21 | 14 0  | 36 21 | 64 3  | 97 37  | 133 43 | 169 25 |
| 22 | 14 41 | 37 20 | 65 5  | 98 48  | 134 55 | 170 36 |
| 23 | 15 22 | 38 0  | 66 7  | 99 59  | 136 7  | 171 46 |
| 24 | 16 4  | 38 50 | 67 10 | 101 10 | 137 19 | 172 57 |
| 25 | 16 46 | 39 40 | 68 13 | 102 22 | 138 31 | 174 7  |
| 26 | 17 28 | 40 31 | 69 17 | 103 34 | 139 43 | 175 18 |
| 27 | 18 20 | 41 22 | 70 21 | 104 46 | 140 55 | 176 29 |
| 28 | 18 52 | 42 14 | 71 26 | 105 58 | 142 7  | 177 39 |
| 29 | 19 35 | 43 6  | 72 31 | 107 10 | 143 19 | 178 50 |
| 30 | 20 18 | 43 59 | 73 36 | 108 23 | 144 30 | 180 0  |



Ad latitudinem .33. Graduum

| i  | l      | m      | ¶      | o      | z      | x      |
|----|--------|--------|--------|--------|--------|--------|
| S  | S m    | S m    | S m    | S m    | S m    | S m    |
| 0  | 180 0  | 215 30 | 251 37 | 286 24 | 316 1  | 339 42 |
| 1  | 181 10 | 216 41 | 252 50 | 287 29 | 316 54 | 340 25 |
| 2  | 182 21 | 217 53 | 254 2  | 288 34 | 317 46 | 341 8  |
| 3  | 183 31 | 219 5  | 255 14 | 289 39 | 318 38 | 341 50 |
| 4  | 184 42 | 220 17 | 256 26 | 290 43 | 319 29 | 342 32 |
| 5  | 185 53 | 221 29 | 257 38 | 291 47 | 320 20 | 343 14 |
| 6  | 187 3  | 222 41 | 258 50 | 292 50 | 321 10 | 343 56 |
| 7  | 188 14 | 223 53 | 260 1  | 293 53 | 322 0  | 344 38 |
| 8  | 189 24 | 225 5  | 261 12 | 294 55 | 322 50 | 345 19 |
| 9  | 190 35 | 226 17 | 262 23 | 295 57 | 323 39 | 346 0  |
| 10 | 191 46 | 227 30 | 263 34 | 296 59 | 324 28 | 346 41 |
| 11 | 192 56 | 228 42 | 264 45 | 298 0  | 325 17 | 347 22 |
| 12 | 194 7  | 229 54 | 265 56 | 299 1  | 326 6  | 348 3  |
| 13 | 195 18 | 231 6  | 267 7  | 300 1  | 326 54 | 348 43 |
| 14 | 196 29 | 232 18 | 268 17 | 301 1  | 327 16 | 349 24 |
| 15 | 197 40 | 233 31 | 269 27 | 302 1  | 328 29 | 350 4  |
| 16 | 198 51 | 234 44 | 270 37 | 303 0  | 329 16 | 350 44 |
| 17 | 200 2  | 235 57 | 271 46 | 303 59 | 330 2  | 351 24 |
| 18 | 201 13 | 237 9  | 272 55 | 304 57 | 330 48 | 352 4  |
| 19 | 202 24 | 238 22 | 274 4  | 305 55 | 331 34 | 352 44 |
| 20 | 203 35 | 239 34 | 275 13 | 306 52 | 332 20 | 353 24 |
| 21 | 204 46 | 240 47 | 276 21 | 307 49 | 333 5  | 354 4  |
| 22 | 205 57 | 241 59 | 277 29 | 308 45 | 333 50 | 354 44 |
| 23 | 207 9  | 243 12 | 278 37 | 309 41 | 334 35 | 355 24 |
| 24 | 208 20 | 244 24 | 279 45 | 310 37 | 335 20 | 356 4  |
| 25 | 209 32 | 245 36 | 280 53 | 311 32 | 336 5  | 356 43 |
| 26 | 210 43 | 246 49 | 282 0  | 312 27 | 336 49 | 357 23 |
| 27 | 211 55 | 248 1  | 283 6  | 313 21 | 337 33 | 358 2  |
| 28 | 213 6  | 249 13 | 284 12 | 314 15 | 338 16 | 358 42 |
| 29 | 214 18 | 250 25 | 285 18 | 315 8  | 338 59 | 359 21 |
| 30 | 215 30 | 251 37 | 286 24 | 316 1  | 339 42 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | Ω      | np     |  |
|----|-------|-------|-------|--------|--------|--------|--|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |  |
| 0  | 0 0   | 20 1  | 43 26 | 72 57  | 107 50 | 144 13 |  |
| 1  | 0 38  | 20 43 | 44 19 | 74 3   | 109 2  | 145 26 |  |
| 2  | 1 17  | 21 26 | 45 12 | 75 9   | 110 15 | 146 38 |  |
| 3  | 1 56  | 22 9  | 46 6  | 76 15  | 111 27 | 147 50 |  |
| 4  | 2 35  | 22 52 | 47 0  | 77 21  | 112 40 | 149 2  |  |
| 5  | 3 14  | 23 35 | 47 54 | 78 28  | 113 53 | 150 14 |  |
| 6  | 3 53  | 24 19 | 48 49 | 79 36  | 115 5  | 151 26 |  |
| 7  | 4 32  | 25 3  | 49 44 | 80 44  | 116 18 | 152 38 |  |
| 8  | 5 11  | 25 47 | 50 40 | 81 52  | 117 31 | 153 50 |  |
| 9  | 5 50  | 26 32 | 51 36 | 83 0   | 118 44 | 155 2  |  |
| 10 | 6 30  | 27 17 | 52 32 | 84 9   | 119 57 | 156 13 |  |
| 11 | 7 9   | 28 2  | 53 29 | 85 18  | 121 10 | 157 25 |  |
| 12 | 7 48  | 28 47 | 54 26 | 86 27  | 122 23 | 158 37 |  |
| 13 | 8 28  | 29 33 | 55 24 | 87 37  | 123 37 | 159 48 |  |
| 14 | 9 7   | 30 19 | 56 23 | 88 46  | 124 50 | 161 0  |  |
| 15 | 9 47  | 31 5  | 57 22 | 89 56  | 126 3  | 162 11 |  |
| 16 | 10 27 | 31 52 | 58 21 | 91 6   | 127 16 | 163 23 |  |
| 17 | 11 7  | 32 39 | 59 21 | 92 17  | 128 29 | 164 34 |  |
| 18 | 11 47 | 33 27 | 60 21 | 93 28  | 129 42 | 165 46 |  |
| 19 | 12 27 | 34 15 | 61 22 | 94 39  | 130 55 | 166 57 |  |
| 20 | 13 7  | 35 3  | 62 23 | 95 50  | 132 7  | 168 8  |  |
| 21 | 13 48 | 35 52 | 63 24 | 97 1   | 133 20 | 169 20 |  |
| 22 | 14 29 | 36 41 | 64 26 | 98 13  | 134 33 | 170 31 |  |
| 23 | 15 10 | 37 30 | 65 28 | 99 24  | 135 46 | 171 42 |  |
| 24 | 15 51 | 38 19 | 66 31 | 100 36 | 136 59 | 172 53 |  |
| 25 | 16 32 | 39 9  | 67 34 | 101 48 | 138 11 | 174 4  |  |
| 26 | 17 13 | 40 0  | 68 38 | 103 0  | 139 24 | 175 16 |  |
| 27 | 17 55 | 40 51 | 69 42 | 104 12 | 140 36 | 176 27 |  |
| 28 | 18 37 | 41 42 | 70 47 | 105 25 | 141 49 | 177 38 |  |
| 29 | 19 19 | 42 34 | 71 52 | 106 37 | 143 1  | 178 49 |  |
| 30 | 20 1  | 43 26 | 72 57 | 107 50 | 144 13 | 180 0  |  |



Ad latitudinem .34. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 215 47 | 252 10 | 287 3  | 316 34 | 339 59 |
| 1  | 181 11 | 216 59 | 253 23 | 288 8  | 317 26 | 340 41 |
| 2  | 182 22 | 218 11 | 254 35 | 289 13 | 318 18 | 341 23 |
| 3  | 183 33 | 219 24 | 255 48 | 290 18 | 319 9  | 342 5  |
| 4  | 184 44 | 220 36 | 257 0  | 291 22 | 320 0  | 342 47 |
| 5  | 185 56 | 221 49 | 258 12 | 292 26 | 320 51 | 343 28 |
| 6  | 187 7  | 223 1  | 259 24 | 293 29 | 321 41 | 344 9  |
| 7  | 188 18 | 224 14 | 260 36 | 294 32 | 322 30 | 344 50 |
| 8  | 189 29 | 225 27 | 261 47 | 295 34 | 323 19 | 345 31 |
| 9  | 190 40 | 226 40 | 262 59 | 296 36 | 324 8  | 346 12 |
| 10 | 191 52 | 227 53 | 264 10 | 297 37 | 324 57 | 346 53 |
| 11 | 193 3  | 229 5  | 265 21 | 298 38 | 325 45 | 347 33 |
| 12 | 194 14 | 230 18 | 266 32 | 299 39 | 326 33 | 348 13 |
| 13 | 195 26 | 231 31 | 267 43 | 300 39 | 327 21 | 348 53 |
| 14 | 196 37 | 232 44 | 268 54 | 301 39 | 328 8  | 349 33 |
| 15 | 197 49 | 233 57 | 270 4  | 302 38 | 328 55 | 350 13 |
| 16 | 199 0  | 235 10 | 271 14 | 303 37 | 329 41 | 350 53 |
| 17 | 200 12 | 236 23 | 272 23 | 304 36 | 330 27 | 351 32 |
| 18 | 201 23 | 237 37 | 273 33 | 305 34 | 331 13 | 352 12 |
| 19 | 202 35 | 238 50 | 274 42 | 306 31 | 331 58 | 352 51 |
| 20 | 203 47 | 240 3  | 275 51 | 307 28 | 332 43 | 353 30 |
| 21 | 204 58 | 241 16 | 277 0  | 308 24 | 333 28 | 354 10 |
| 22 | 206 10 | 242 29 | 278 8  | 309 20 | 334 13 | 354 49 |
| 23 | 207 22 | 243 42 | 279 16 | 310 16 | 334 57 | 355 28 |
| 24 | 208 34 | 244 55 | 280 24 | 311 11 | 335 41 | 356 7  |
| 25 | 209 46 | 246 7  | 281 32 | 312 6  | 336 25 | 356 46 |
| 26 | 210 58 | 247 20 | 282 39 | 313 0  | 337 8  | 357 25 |
| 27 | 212 10 | 248 33 | 283 45 | 313 54 | 337 51 | 358 4  |
| 28 | 213 22 | 249 45 | 284 51 | 314 48 | 338 34 | 358 43 |
| 29 | 214 24 | 250 58 | 285 57 | 315 41 | 339 17 | 359 22 |
| 30 | 215 47 | 252 10 | 287 3  | 316 34 | 339 59 | 360 0  |



# Tabula Ascensionum Obliquarum.

|    | V     | γ     | π     | ε      | ♌      | ♍      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 19 43 | 42 52 | 72 16  | 107 16 | 143 55 |
| 1  | 0 38  | 20 25 | 43 44 | 73 22  | 108 29 | 145 8  |
| 2  | 1 16  | 21 7  | 44 37 | 74 28  | 109 44 | 146 21 |
| 3  | 1 54  | 21 49 | 45 30 | 75 34  | 110 55 | 147 33 |
| 4  | 2 32  | 22 31 | 46 24 | 76 41  | 112 8  | 148 46 |
| 5  | 3 11  | 23 14 | 47 18 | 77 48  | 113 22 | 149 58 |
| 6  | 3 49  | 23 57 | 48 13 | 78 56  | 114 35 | 151 11 |
| 7  | 4 28  | 24 40 | 49 8  | 80 4   | 115 48 | 152 24 |
| 8  | 5 6   | 25 24 | 50 3  | 81 12  | 117 1  | 153 36 |
| 9  | 5 45  | 26 8  | 50 59 | 82 20  | 118 14 | 154 49 |
| 10 | 6 24  | 26 53 | 51 55 | 83 29  | 119 28 | 156 1  |
| 11 | 7 2   | 27 38 | 52 52 | 84 38  | 120 41 | 157 14 |
| 12 | 7 41  | 28 23 | 53 49 | 85 48  | 121 55 | 158 26 |
| 13 | 8 20  | 29 8  | 54 47 | 86 57  | 123 9  | 159 38 |
| 14 | 8 59  | 29 53 | 55 45 | 88 7   | 124 23 | 160 50 |
| 15 | 9 38  | 30 39 | 56 43 | 89 17  | 125 37 | 162 2  |
| 16 | 10 17 | 31 25 | 57 42 | 90 28  | 126 51 | 163 14 |
| 17 | 10 56 | 32 12 | 58 41 | 91 39  | 128 4  | 164 26 |
| 18 | 11 36 | 32 59 | 59 41 | 92 50  | 129 17 | 165 38 |
| 19 | 12 15 | 33 46 | 60 42 | 94 1   | 130 30 | 166 50 |
| 20 | 12 55 | 34 34 | 61 43 | 95 13  | 131 43 | 168 2  |
| 21 | 13 35 | 35 22 | 62 45 | 96 24  | 132 57 | 169 14 |
| 22 | 14 15 | 36 10 | 63 47 | 97 36  | 134 10 | 170 26 |
| 23 | 14 55 | 36 59 | 64 49 | 98 48  | 135 24 | 171 38 |
| 24 | 15 35 | 37 48 | 65 51 | 100 0  | 136 37 | 172 50 |
| 25 | 16 16 | 38 38 | 66 54 | 101 12 | 137 50 | 174 1  |
| 26 | 16 57 | 39 28 | 67 57 | 102 24 | 139 3  | 175 13 |
| 27 | 17 38 | 40 18 | 69 1  | 103 37 | 140 16 | 176 25 |
| 28 | 18 19 | 41 9  | 70 5  | 104 50 | 141 29 | 177 37 |
| 29 | 19 1  | 42 0  | 71 10 | 106 3  | 142 42 | 178 49 |
| 30 | 19 43 | 42 52 | 72 16 | 107 16 | 143 55 | 180 0  |



Ad latitudinem .35. Graduum.

|    | S      | m      | T      | z      | x      |
|----|--------|--------|--------|--------|--------|
| B  | B m    | B m    | B m    | B m    | B m    |
| 0  | 180 0  | 216 5  | 252 44 | 287 44 | 317 8  |
| 1  | 181 11 | 217 18 | 253 57 | 288 50 | 318 0  |
| 2  | 182 23 | 218 31 | 255 10 | 289 55 | 318 51 |
| 3  | 183 35 | 219 44 | 256 23 | 290 59 | 319 42 |
| 4  | 184 47 | 220 57 | 257 36 | 292 3  | 320 32 |
| 5  | 185 59 | 222 10 | 258 48 | 293 6  | 321 22 |
| 6  | 187 10 | 223 23 | 260 0  | 294 9  | 322 12 |
| 7  | 188 22 | 224 36 | 261 12 | 295 11 | 323 1  |
| 8  | 189 34 | 225 50 | 262 24 | 296 13 | 323 50 |
| 9  | 190 46 | 227 3  | 263 36 | 297 15 | 324 38 |
| 10 | 191 58 | 228 17 | 264 47 | 298 17 | 325 26 |
| 11 | 193 10 | 229 30 | 265 59 | 299 18 | 326 14 |
| 12 | 194 22 | 230 43 | 267 10 | 300 19 | 327 1  |
| 13 | 195 34 | 231 56 | 268 21 | 301 19 | 327 48 |
| 14 | 196 46 | 233 9  | 269 32 | 302 18 | 328 35 |
| 15 | 197 58 | 234 23 | 270 43 | 303 17 | 329 21 |
| 16 | 199 10 | 235 37 | 271 53 | 304 15 | 330 7  |
| 17 | 200 22 | 236 51 | 273 3  | 305 13 | 330 52 |
| 18 | 201 34 | 238 5  | 274 12 | 306 11 | 331 37 |
| 19 | 202 46 | 239 19 | 275 22 | 307 8  | 332 22 |
| 20 | 203 59 | 240 32 | 276 31 | 308 5  | 333 7  |
| 21 | 205 11 | 241 46 | 277 40 | 309 1  | 333 52 |
| 22 | 206 24 | 242 59 | 278 48 | 309 57 | 334 36 |
| 23 | 207 36 | 244 12 | 279 56 | 310 52 | 335 20 |
| 24 | 208 49 | 245 25 | 281 4  | 311 47 | 336 3  |
| 25 | 210 2  | 246 38 | 282 12 | 312 42 | 336 46 |
| 26 | 211 14 | 247 52 | 283 19 | 313 36 | 337 29 |
| 27 | 212 27 | 249 5  | 284 26 | 314 30 | 338 11 |
| 28 | 213 39 | 250 18 | 285 32 | 315 23 | 338 53 |
| 29 | 214 52 | 251 31 | 286 38 | 316 16 | 339 35 |
| 30 | 216 5  | 252 44 | 287 44 | 317 8  | 340 17 |



# Tabula Ascensionum Obliquarum

|    | V     | δ     | II    | Σ      | Ω      | ny     |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 19 24 | 42 18 | 71 35  | 106 42 | 143 36 |
| 1  | 0 37  | 20 5  | 43 10 | 72 41  | 107 55 | 144 50 |
| 2  | 1 15  | 20 46 | 44 2  | 73 47  | 109 9  | 146 3  |
| 3  | 1 52  | 21 28 | 44 55 | 74 53  | 110 22 | 147 17 |
| 4  | 2 30  | 22 10 | 45 48 | 76 0   | 111 36 | 148 30 |
| 5  | 3 8   | 22 52 | 46 42 | 77 7   | 112 50 | 149 43 |
| 6  | 3 46  | 23 35 | 47 36 | 78 15  | 114 3  | 150 57 |
| 7  | 4 24  | 24 18 | 48 30 | 79 23  | 115 17 | 152 10 |
| 8  | 5 2   | 25 1  | 49 25 | 80 31  | 116 30 | 153 23 |
| 9  | 5 40  | 25 45 | 50 20 | 81 40  | 117 44 | 154 36 |
| 10 | 6 18  | 26 29 | 51 16 | 82 49  | 118 58 | 155 49 |
| 11 | 6 56  | 27 13 | 52 12 | 83 58  | 120 12 | 157 2  |
| 12 | 7 34  | 27 57 | 53 9  | 85 8   | 121 26 | 158 15 |
| 13 | 8 12  | 28 41 | 54 7  | 86 18  | 122 40 | 159 28 |
| 14 | 8 50  | 29 26 | 55 5  | 87 28  | 123 55 | 160 41 |
| 15 | 9 29  | 30 11 | 56 4  | 88 38  | 125 9  | 161 53 |
| 16 | 10 7  | 30 57 | 57 3  | 89 49  | 126 23 | 163 6  |
| 17 | 10 46 | 31 43 | 58 2  | 91 0   | 127 37 | 164 19 |
| 18 | 11 25 | 32 30 | 59 2  | 92 11  | 128 51 | 165 31 |
| 19 | 12 4  | 33 17 | 60 2  | 93 22  | 130 5  | 166 44 |
| 20 | 12 43 | 34 4  | 61 3  | 94 34  | 131 19 | 167 56 |
| 21 | 13 22 | 34 52 | 62 4  | 95 46  | 132 33 | 169 9  |
| 22 | 14 1  | 35 40 | 63 6  | 96 58  | 133 47 | 170 21 |
| 23 | 14 41 | 36 28 | 64 8  | 98 10  | 135 1  | 171 34 |
| 24 | 15 21 | 37 17 | 65 10 | 99 23  | 136 15 | 172 46 |
| 25 | 16 1  | 38 6  | 66 13 | 100 36 | 137 28 | 173 58 |
| 26 | 16 41 | 38 56 | 67 16 | 101 49 | 138 42 | 175 11 |
| 27 | 17 21 | 39 46 | 68 20 | 103 2  | 139 56 | 176 23 |
| 28 | 18 2  | 40 36 | 69 24 | 104 15 | 141 9  | 177 36 |
| 29 | 18 43 | 41 27 | 70 29 | 105 28 | 142 23 | 178 40 |
| 30 | 19 24 | 42 18 | 71 35 | 106 42 | 143 36 | 180 0  |



Ad latitudinem .36. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 216 24 | 253 18 | 288 25 | 317 42 | 340 36 |
| 1  | 181 12 | 217 37 | 254 32 | 289 31 | 318 33 | 341 17 |
| 2  | 182 24 | 218 51 | 255 45 | 290 36 | 319 24 | 341 58 |
| 3  | 183 37 | 220 4  | 256 58 | 291 40 | 320 14 | 342 39 |
| 4  | 184 49 | 221 18 | 258 11 | 292 44 | 321 4  | 343 19 |
| 5  | 186 2  | 222 32 | 259 24 | 293 47 | 321 54 | 343 59 |
| 6  | 187 14 | 223 45 | 260 37 | 294 50 | 322 43 | 344 39 |
| 7  | 188 26 | 224 59 | 261 50 | 295 52 | 323 32 | 345 19 |
| 8  | 189 39 | 226 13 | 263 2  | 296 54 | 324 20 | 345 59 |
| 9  | 190 51 | 227 27 | 264 14 | 297 56 | 325 8  | 346 38 |
| 10 | 192 4  | 228 41 | 265 26 | 298 57 | 325 56 | 347 17 |
| 11 | 193 16 | 229 55 | 266 38 | 299 58 | 326 43 | 347 56 |
| 12 | 194 29 | 231 9  | 267 49 | 300 58 | 327 30 | 348 35 |
| 13 | 195 41 | 232 23 | 269 0  | 301 58 | 328 17 | 349 14 |
| 14 | 196 54 | 233 37 | 270 11 | 302 57 | 329 3  | 349 53 |
| 15 | 198 7  | 234 51 | 271 22 | 303 56 | 329 49 | 350 31 |
| 16 | 199 19 | 236 5  | 272 32 | 304 55 | 330 34 | 351 10 |
| 17 | 200 32 | 237 20 | 273 42 | 305 53 | 331 19 | 351 48 |
| 18 | 201 45 | 238 34 | 274 52 | 306 51 | 332 3  | 352 26 |
| 19 | 202 58 | 239 48 | 276 2  | 307 48 | 332 47 | 353 4  |
| 20 | 204 11 | 241 2  | 277 11 | 308 44 | 333 31 | 353 42 |
| 21 | 205 24 | 242 16 | 278 20 | 309 40 | 334 15 | 354 20 |
| 22 | 206 37 | 243 30 | 279 29 | 310 35 | 334 59 | 354 58 |
| 23 | 207 50 | 244 43 | 280 37 | 311 30 | 335 42 | 355 36 |
| 24 | 209 3  | 245 57 | 281 45 | 312 24 | 336 25 | 356 14 |
| 25 | 210 17 | 247 10 | 282 53 | 313 18 | 337 8  | 356 52 |
| 26 | 211 30 | 248 24 | 284 0  | 314 12 | 337 50 | 357 30 |
| 27 | 212 43 | 249 38 | 285 7  | 315 5  | 338 32 | 358 8  |
| 28 | 213 57 | 250 51 | 286 13 | 315 58 | 339 14 | 358 45 |
| 29 | 215 10 | 252 5  | 287 19 | 316 50 | 339 55 | 359 23 |
| 30 | 216 24 | 253 18 | 288 25 | 317 42 | 340 36 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 19 5  | 41 42 | 70 52  | 106 6  | 143 17 |
| 1  | 0 37  | 19 46 | 42 34 | 71 58  | 107 20 | 144 31 |
| 2  | 1 14  | 20 27 | 43 26 | 73 4   | 108 34 | 145 45 |
| 3  | 1 51  | 21 8  | 44 18 | 74 11  | 109 48 | 146 59 |
| 4  | 2 28  | 21 49 | 45 11 | 75 18  | 111 2  | 148 13 |
| 5  | 3 5   | 22 30 | 46 4  | 76 25  | 112 16 | 149 27 |
| 6  | 3 42  | 23 12 | 46 58 | 77 33  | 113 30 | 150 41 |
| 7  | 4 19  | 23 54 | 47 52 | 78 41  | 114 44 | 151 55 |
| 8  | 4 56  | 24 37 | 48 47 | 79 49  | 115 59 | 153 19 |
| 9  | 5 33  | 25 20 | 49 42 | 80 58  | 117 13 | 154 23 |
| 10 | 6 11  | 26 3  | 50 37 | 82 7   | 118 28 | 155 36 |
| 11 | 6 48  | 26 46 | 51 33 | 83 16  | 119 42 | 156 50 |
| 12 | 7 26  | 27 30 | 52 30 | 84 26  | 120 57 | 158 3  |
| 13 | 8 3   | 28 14 | 53 27 | 85 36  | 122 11 | 159 17 |
| 14 | 8 41  | 28 58 | 54 25 | 86 46  | 123 26 | 160 30 |
| 15 | 9 19  | 29 43 | 55 23 | 87 57  | 124 41 | 161 43 |
| 16 | 9 57  | 30 28 | 56 22 | 89 8   | 125 56 | 162 57 |
| 17 | 10 35 | 31 14 | 57 21 | 90 19  | 127 10 | 164 10 |
| 18 | 11 13 | 32 0  | 58 21 | 91 31  | 128 25 | 165 23 |
| 19 | 11 51 | 32 47 | 59 21 | 92 43  | 129 39 | 166 36 |
| 20 | 12 30 | 33 34 | 60 21 | 93 55  | 130 53 | 167 49 |
| 21 | 13 9  | 34 21 | 61 22 | 95 7   | 132 8  | 169 3  |
| 22 | 13 48 | 35 8  | 62 24 | 96 19  | 133 23 | 170 16 |
| 23 | 14 27 | 35 56 | 63 26 | 97 32  | 134 37 | 171 29 |
| 24 | 15 6  | 36 44 | 64 28 | 98 45  | 135 52 | 172 18 |
| 25 | 15 45 | 37 32 | 65 31 | 99 58  | 137 6  | 173 55 |
| 26 | 16 25 | 38 21 | 66 34 | 101 11 | 138 21 | 175 8  |
| 27 | 17 5  | 39 10 | 67 38 | 102 24 | 139 35 | 176 21 |
| 28 | 17 45 | 40 0  | 68 42 | 103 38 | 140 49 | 177 34 |
| 29 | 18 25 | 40 51 | 69 47 | 104 52 | 142 3  | 178 47 |
| 30 | 19 5  | 41 42 | 70 52 | 106 6  | 143 17 | 180 0  |



Ad latitudinem .37. Graduum.

| °  | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| °  | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 150 0  | 216 43 | 253 54 | 289 8  | 318 18 | 340 55 |
| 1  | 181 13 | 217 57 | 255 8  | 290 13 | 319 9  | 341 35 |
| 2  | 182 26 | 219 11 | 256 22 | 291 18 | 320 0  | 342 15 |
| 3  | 183 39 | 220 25 | 257 36 | 292 22 | 320 50 | 342 55 |
| 4  | 184 52 | 221 39 | 258 49 | 293 26 | 321 39 | 343 35 |
| 5  | 186 5  | 222 54 | 260 2  | 294 29 | 322 28 | 344 15 |
| 6  | 187 18 | 224 8  | 261 15 | 295 32 | 323 16 | 344 54 |
| 7  | 188 31 | 225 23 | 262 28 | 296 34 | 324 4  | 345 33 |
| 8  | 189 44 | 226 37 | 263 41 | 297 36 | 324 52 | 346 12 |
| 9  | 190 57 | 227 52 | 264 53 | 298 38 | 325 39 | 346 51 |
| 10 | 192 11 | 229 7  | 265 5  | 299 39 | 326 26 | 347 30 |
| 11 | 193 24 | 230 21 | 266 17 | 300 39 | 327 13 | 348 9  |
| 12 | 194 37 | 231 35 | 268 29 | 301 39 | 328 0  | 348 47 |
| 13 | 195 50 | 232 50 | 269 41 | 302 39 | 328 46 | 349 25 |
| 14 | 197 3  | 234 4  | 270 52 | 303 38 | 329 32 | 350 3  |
| 15 | 198 17 | 235 19 | 272 3  | 304 37 | 330 17 | 350 41 |
| 16 | 199 30 | 236 34 | 273 14 | 305 35 | 331 2  | 351 19 |
| 17 | 200 43 | 237 49 | 274 24 | 306 33 | 331 46 | 351 57 |
| 18 | 201 57 | 239 3  | 275 34 | 307 30 | 332 30 | 352 34 |
| 19 | 203 10 | 240 18 | 276 44 | 308 27 | 333 14 | 353 12 |
| 20 | 204 24 | 241 32 | 277 53 | 309 23 | 333 57 | 353 49 |
| 21 | 205 37 | 242 47 | 279 2  | 310 18 | 334 40 | 354 27 |
| 22 | 206 51 | 244 1  | 280 11 | 311 13 | 335 23 | 355 4  |
| 23 | 208 5  | 245 16 | 281 19 | 312 8  | 336 6  | 355 41 |
| 24 | 209 19 | 246 30 | 282 27 | 313 2  | 336 48 | 356 18 |
| 25 | 210 33 | 247 44 | 283 35 | 313 56 | 337 30 | 356 55 |
| 26 | 211 47 | 248 58 | 284 42 | 314 49 | 338 11 | 357 32 |
| 27 | 213 1  | 250 12 | 285 49 | 315 42 | 338 52 | 358 9  |
| 28 | 214 15 | 251 26 | 286 56 | 316 34 | 339 33 | 358 46 |
| 29 | 215 29 | 252 40 | 288 2  | 317 26 | 340 14 | 359 23 |
| 30 | 216 43 | 253 54 | 289 8  | 318 18 | 340 55 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 18 45 | 41 6  | 70 8   | 105 30 | 142 57 |
| 1  | 0 36  | 19 25 | 41 57 | 71 14  | 106 44 | 144 12 |
| 2  | 1 12  | 20 5  | 42 48 | 72 20  | 107 58 | 145 27 |
| 3  | 1 49  | 20 45 | 43 40 | 73 27  | 109 13 | 146 41 |
| 4  | 2 25  | 21 26 | 44 32 | 74 34  | 110 27 | 147 56 |
| 5  | 3 2   | 22 7  | 45 25 | 75 14  | 111 42 | 149 10 |
| 6  | 3 38  | 22 49 | 46 18 | 76 49  | 112 56 | 150 25 |
| 7  | 4 14  | 23 31 | 47 12 | 77 53  | 114 11 | 151 40 |
| 8  | 4 51  | 24 13 | 48 6  | 79 6   | 115 26 | 152 54 |
| 9  | 5 27  | 24 55 | 49 1  | 80 15  | 116 41 | 154 9  |
| 10 | 6 4   | 25 38 | 49 57 | 81 24  | 117 56 | 155 23 |
| 11 | 6 41  | 26 21 | 50 53 | 82 34  | 119 11 | 156 37 |
| 12 | 7 18  | 27 4  | 51 49 | 83 44  | 120 27 | 157 51 |
| 13 | 7 55  | 27 47 | 52 46 | 84 54  | 121 43 | 159 5  |
| 14 | 8 32  | 28 31 | 53 43 | 86 4   | 122 58 | 160 19 |
| 15 | 9 9   | 29 15 | 54 41 | 87 15  | 124 13 | 161 33 |
| 16 | 9 46  | 30 0  | 55 39 | 88 26  | 125 28 | 162 47 |
| 17 | 10 24 | 30 45 | 56 38 | 89 38  | 126 43 | 164 1  |
| 18 | 11 1  | 31 30 | 57 37 | 90 50  | 127 58 | 165 15 |
| 19 | 11 39 | 32 16 | 58 37 | 92 2   | 129 13 | 166 29 |
| 20 | 12 17 | 33 2  | 59 38 | 93 15  | 130 28 | 167 42 |
| 21 | 12 55 | 33 48 | 60 39 | 94 27  | 131 43 | 168 56 |
| 22 | 13 33 | 34 35 | 61 40 | 95 40  | 132 58 | 170 10 |
| 23 | 14 11 | 35 22 | 62 42 | 96 53  | 134 13 | 171 24 |
| 24 | 14 49 | 36 10 | 63 44 | 98 6   | 135 28 | 172 38 |
| 25 | 15 28 | 36 58 | 64 47 | 99 19  | 136 43 | 173 52 |
| 26 | 16 7  | 37 47 | 65 50 | 100 33 | 137 58 | 175 6  |
| 27 | 16 46 | 38 36 | 66 54 | 101 47 | 139 13 | 176 20 |
| 28 | 17 25 | 39 26 | 67 58 | 103 1  | 140 28 | 177 33 |
| 29 | 18 5  | 40 16 | 69 3  | 104 15 | 141 43 | 178 47 |
| 30 | 18 45 | 41 6  | 70 8  | 105 30 | 142 57 | 180 0  |



Ad latitudinem .38. Graduum

|    | °   | m  |     | °  | m   |    | °   | m  |     | °  | m   |    | ° | m |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|---|---|
| 0  | 180 | 0  | 217 | 3  | 254 | 30 | 289 | 52 | 318 | 54 | 341 | 15 |   |   |
| 1  | 181 | 13 | 218 | 17 | 255 | 45 | 290 | 57 | 319 | 44 | 341 | 55 |   |   |
| 2  | 182 | 27 | 219 | 32 | 256 | 59 | 292 | 2  | 320 | 34 | 342 | 35 |   |   |
| 3  | 183 | 40 | 220 | 47 | 258 | 13 | 293 | 6  | 321 | 24 | 343 | 14 |   |   |
| 4  | 184 | 54 | 222 | 2  | 259 | 27 | 294 | 10 | 322 | 13 | 343 | 53 |   |   |
| 5  | 186 | 8  | 223 | 17 | 260 | 41 | 295 | 13 | 323 | 2  | 344 | 32 |   |   |
| 6  | 187 | 22 | 224 | 32 | 261 | 54 | 296 | 16 | 323 | 50 | 345 | 11 |   |   |
| 7  | 188 | 36 | 225 | 47 | 263 | 7  | 297 | 18 | 324 | 38 | 345 | 49 |   |   |
| 8  | 189 | 50 | 227 | 2  | 264 | 20 | 298 | 20 | 325 | 25 | 346 | 27 |   |   |
| 9  | 191 | 4  | 228 | 17 | 265 | 33 | 299 | 21 | 326 | 12 | 347 | 5  |   |   |
| 10 | 192 | 18 | 229 | 32 | 266 | 45 | 300 | 22 | 326 | 58 | 347 | 43 |   |   |
| 11 | 193 | 31 | 230 | 47 | 267 | 58 | 301 | 23 | 327 | 44 | 348 | 21 |   |   |
| 12 | 194 | 45 | 232 | 2  | 269 | 10 | 302 | 23 | 328 | 30 | 348 | 59 |   |   |
| 13 | 195 | 59 | 233 | 17 | 270 | 22 | 303 | 22 | 329 | 15 | 349 | 36 |   |   |
| 14 | 197 | 13 | 234 | 32 | 271 | 34 | 304 | 21 | 330 | 0  | 350 | 14 |   |   |
| 15 | 198 | 27 | 235 | 47 | 272 | 45 | 305 | 19 | 330 | 45 | 350 | 51 |   |   |
| 16 | 199 | 41 | 237 | 2  | 273 | 56 | 306 | 17 | 331 | 29 | 351 | 28 |   |   |
| 17 | 200 | 55 | 238 | 17 | 275 | 6  | 307 | 14 | 332 | 13 | 352 | 5  |   |   |
| 18 | 202 | 9  | 239 | 33 | 276 | 16 | 308 | 11 | 332 | 56 | 352 | 42 |   |   |
| 19 | 203 | 23 | 240 | 49 | 277 | 26 | 309 | 7  | 333 | 39 | 353 | 19 |   |   |
| 20 | 204 | 37 | 242 | 4  | 278 | 36 | 310 | 3  | 334 | 22 | 353 | 56 |   |   |
| 21 | 205 | 51 | 243 | 19 | 279 | 45 | 310 | 59 | 335 | 5  | 354 | 33 |   |   |
| 22 | 207 | 6  | 244 | 34 | 280 | 54 | 311 | 54 | 335 | 47 | 355 | 9  |   |   |
| 23 | 208 | 20 | 245 | 49 | 282 | 3  | 312 | 48 | 336 | 29 | 355 | 46 |   |   |
| 24 | 209 | 35 | 247 | 4  | 283 | 11 | 313 | 42 | 337 | 11 | 356 | 22 |   |   |
| 25 | 210 | 50 | 248 | 18 | 284 | 19 | 314 | 35 | 337 | 53 | 356 | 58 |   |   |
| 26 | 212 | 4  | 249 | 33 | 285 | 26 | 315 | 28 | 338 | 34 | 357 | 35 |   |   |
| 27 | 213 | 19 | 250 | 47 | 286 | 33 | 316 | 20 | 339 | 15 | 358 | 11 |   |   |
| 28 | 214 | 33 | 252 | 2  | 287 | 40 | 317 | 12 | 339 | 55 | 358 | 48 |   |   |
| 29 | 215 | 48 | 253 | 16 | 288 | 46 | 318 | 3  | 340 | 35 | 359 | 24 |   |   |
| 30 | 217 | 3  | 254 | 30 | 289 | 52 | 318 | 54 | 341 | 15 | 360 | 0  |   |   |



# Tabula Ascensionum Obliquarum

| ♄  | γ     | δ     | π     | ♅      | ♁      | ♃      |
|----|-------|-------|-------|--------|--------|--------|
| ♄  | ♄ m   | ♄ m   | ♄ m   | ♄ m    | ♄ m    | ♄ m    |
| 0  | 0 0   | 18 25 | 40 28 | 69 23  | 104 52 | 142 37 |
| 1  | 0 35  | 19 4  | 41 19 | 70 29  | 106 7  | 143 53 |
| 2  | 1 11  | 19 44 | 42 10 | 71 35  | 107 22 | 145 8  |
| 3  | 1 46  | 20 24 | 43 2  | 72 42  | 108 37 | 146 24 |
| 4  | 2 22  | 21 4  | 43 54 | 73 49  | 109 52 | 147 39 |
| 5  | 2 58  | 21 44 | 44 46 | 74 56  | 111 7  | 148 54 |
| 6  | 3 34  | 22 25 | 45 39 | 76 4   | 112 22 | 150 9  |
| 7  | 4 10  | 23 6  | 46 32 | 77 12  | 113 37 | 151 24 |
| 8  | 4 46  | 23 47 | 47 26 | 78 21  | 114 53 | 152 39 |
| 9  | 5 22  | 24 29 | 48 20 | 79 30  | 116 8  | 153 54 |
| 10 | 5 58  | 25 11 | 49 15 | 80 39  | 117 24 | 155 9  |
| 11 | 6 34  | 25 53 | 50 10 | 81 49  | 118 39 | 156 24 |
| 12 | 7 10  | 26 26 | 51 6  | 82 59  | 119 55 | 157 39 |
| 13 | 7 46  | 27 19 | 52 3  | 84 10  | 121 11 | 158 54 |
| 14 | 8 22  | 28 2  | 53 0  | 85 21  | 122 27 | 160 9  |
| 15 | 8 59  | 28 45 | 53 58 | 86 32  | 123 43 | 161 23 |
| 16 | 9 35  | 29 29 | 54 56 | 87 44  | 124 59 | 162 38 |
| 17 | 10 12 | 30 13 | 55 55 | 88 56  | 126 15 | 163 53 |
| 18 | 10 49 | 30 58 | 56 54 | 90 8   | 127 30 | 165 7  |
| 19 | 11 26 | 31 44 | 57 53 | 91 20  | 128 46 | 166 22 |
| 20 | 12 3  | 32 30 | 58 53 | 92 33  | 130 1  | 167 36 |
| 21 | 12 40 | 33 16 | 59 54 | 93 46  | 131 17 | 168 51 |
| 22 | 13 18 | 34 2  | 60 55 | 94 59  | 132 33 | 170 5  |
| 23 | 13 56 | 34 49 | 61 57 | 96 12  | 133 49 | 171 20 |
| 24 | 14 34 | 35 36 | 62 59 | 97 26  | 135 5  | 172 34 |
| 25 | 15 12 | 36 23 | 64 2  | 98 40  | 136 20 | 173 48 |
| 26 | 15 50 | 37 11 | 65 5  | 99 54  | 137 36 | 175 3  |
| 27 | 16 28 | 37 59 | 66 9  | 101 8  | 138 51 | 176 17 |
| 28 | 17 7  | 38 48 | 67 13 | 102 22 | 140 7  | 177 32 |
| 29 | 17 46 | 39 38 | 68 18 | 103 37 | 141 22 | 178 46 |
| 30 | 18 25 | 40 28 | 69 23 | 104 52 | 142 37 | 180 0  |



Ad latitudinem .39. Graduum

|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| S  | S   | m  | S   | m  | S   | m  | S   | m  | S   | m  | S   | m  |
| 0  | 180 | 0  | 217 | 23 | 255 | 8  | 290 | 37 | 319 | 32 | 341 | 35 |
| 1  | 181 | 14 | 218 | 38 | 256 | 23 | 291 | 42 | 320 | 22 | 342 | 14 |
| 2  | 182 | 28 | 219 | 53 | 257 | 38 | 292 | 47 | 321 | 12 | 342 | 53 |
| 3  | 183 | 43 | 221 | 9  | 258 | 52 | 293 | 51 | 322 | 1  | 343 | 32 |
| 4  | 184 | 57 | 222 | 24 | 260 | 6  | 294 | 55 | 322 | 49 | 344 | 10 |
| 5  | 186 | 12 | 223 | 40 | 261 | 20 | 295 | 58 | 323 | 37 | 344 | 48 |
| 6  | 187 | 26 | 224 | 55 | 262 | 34 | 297 | 1  | 324 | 24 | 345 | 26 |
| 7  | 188 | 40 | 226 | 11 | 263 | 48 | 298 | 3  | 325 | 11 | 346 | 4  |
| 8  | 189 | 55 | 227 | 27 | 265 | 1  | 299 | 5  | 325 | 58 | 346 | 42 |
| 9  | 191 | 9  | 228 | 43 | 266 | 14 | 300 | 6  | 326 | 44 | 347 | 20 |
| 10 | 192 | 24 | 229 | 59 | 267 | 27 | 301 | 7  | 327 | 30 | 347 | 57 |
| 11 | 193 | 38 | 231 | 14 | 268 | 40 | 302 | 7  | 328 | 16 | 348 | 34 |
| 12 | 194 | 53 | 232 | 30 | 269 | 52 | 303 | 6  | 329 | 2  | 349 | 11 |
| 13 | 196 | 7  | 233 | 45 | 271 | 4  | 304 | 5  | 329 | 47 | 349 | 47 |
| 14 | 197 | 22 | 235 | 1  | 272 | 16 | 305 | 4  | 330 | 31 | 350 | 25 |
| 15 | 198 | 37 | 236 | 17 | 273 | 28 | 306 | 2  | 331 | 15 | 351 | 1  |
| 16 | 199 | 51 | 237 | 33 | 274 | 39 | 307 | 0  | 331 | 58 | 351 | 38 |
| 17 | 201 | 6  | 238 | 49 | 275 | 50 | 307 | 57 | 332 | 41 | 352 | 14 |
| 18 | 202 | 21 | 240 | 5  | 277 | 1  | 308 | 54 | 333 | 14 | 352 | 50 |
| 19 | 203 | 36 | 241 | 21 | 278 | 11 | 309 | 50 | 334 | 7  | 353 | 26 |
| 20 | 204 | 51 | 242 | 36 | 279 | 21 | 310 | 45 | 334 | 49 | 354 | 2  |
| 21 | 206 | 6  | 243 | 52 | 280 | 30 | 311 | 40 | 335 | 31 | 354 | 38 |
| 22 | 207 | 21 | 245 | 7  | 281 | 39 | 312 | 34 | 336 | 13 | 355 | 14 |
| 23 | 208 | 36 | 246 | 23 | 282 | 48 | 313 | 28 | 336 | 54 | 355 | 50 |
| 24 | 209 | 51 | 247 | 38 | 283 | 56 | 314 | 21 | 337 | 35 | 356 | 26 |
| 25 | 211 | 6  | 248 | 53 | 285 | 4  | 315 | 14 | 338 | 16 | 357 | 2  |
| 26 | 212 | 21 | 250 | 8  | 286 | 11 | 316 | 6  | 338 | 56 | 357 | 38 |
| 27 | 213 | 36 | 251 | 23 | 287 | 18 | 316 | 58 | 339 | 36 | 358 | 14 |
| 28 | 214 | 52 | 252 | 38 | 288 | 25 | 317 | 50 | 340 | 16 | 358 | 48 |
| 29 | 216 | 7  | 253 | 53 | 289 | 31 | 318 | 41 | 340 | 56 | 359 | 25 |
| 30 | 217 | 23 | 255 | 8  | 290 | 37 | 319 | 32 | 341 | 35 | 360 | 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ      | η      | θ      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 18 4  | 39 49 | 68 36  | 104 13 | 142 16 |
| 1  | 0 35  | 18 43 | 40 39 | 69 41  | 105 28 | 143 32 |
| 2  | 1 10  | 19 22 | 41 30 | 70 54  | 106 44 | 144 48 |
| 3  | 1 45  | 20 1  | 42 21 | 71 57  | 107 59 | 146 4  |
| 4  | 2 20  | 20 40 | 43 12 | 73 1   | 109 15 | 147 20 |
| 5  | 2 55  | 21 20 | 44 4  | 74 9   | 110 31 | 148 36 |
| 6  | 3 30  | 22 0  | 44 56 | 75 17  | 111 46 | 149 52 |
| 7  | 4 5   | 22 41 | 45 49 | 76 25  | 113 2  | 151 8  |
| 8  | 4 40  | 23 22 | 46 43 | 77 34  | 114 28 | 152 23 |
| 9  | 5 15  | 24 3  | 47 37 | 78 43  | 115 34 | 153 39 |
| 10 | 5 51  | 24 44 | 48 32 | 79 53  | 116 50 | 154 54 |
| 11 | 6 26  | 25 26 | 49 27 | 81 3   | 118 6  | 156 10 |
| 12 | 7 1   | 26 8  | 50 23 | 82 13  | 119 22 | 157 26 |
| 13 | 7 37  | 26 50 | 51 19 | 83 24  | 120 39 | 158 41 |
| 14 | 8 12  | 27 32 | 52 16 | 84 35  | 121 55 | 159 57 |
| 15 | 8 48  | 28 14 | 53 13 | 85 47  | 123 12 | 161 12 |
| 16 | 9 24  | 28 57 | 54 11 | 86 59  | 124 28 | 162 28 |
| 17 | 10 0  | 29 41 | 55 9  | 88 12  | 125 45 | 163 43 |
| 18 | 10 36 | 30 26 | 56 8  | 89 24  | 127 2  | 164 59 |
| 19 | 11 12 | 31 11 | 57 7  | 90 37  | 128 18 | 166 14 |
| 20 | 11 48 | 31 56 | 58 7  | 91 50  | 129 34 | 167 29 |
| 21 | 12 25 | 32 41 | 59 7  | 93 3   | 130 51 | 168 45 |
| 22 | 13 2  | 33 27 | 60 8  | 94 17  | 132 7  | 170 0  |
| 23 | 13 39 | 34 13 | 61 10 | 95 30  | 133 24 | 171 15 |
| 24 | 14 16 | 35 0  | 62 12 | 96 44  | 134 40 | 172 30 |
| 25 | 14 54 | 35 47 | 63 15 | 97 58  | 135 56 | 173 45 |
| 26 | 15 32 | 36 34 | 64 18 | 99 13  | 137 12 | 175 0  |
| 27 | 16 10 | 37 22 | 65 22 | 100 28 | 138 28 | 176 15 |
| 28 | 16 48 | 38 10 | 66 26 | 101 43 | 139 44 | 177 30 |
| 29 | 17 26 | 38 29 | 67 31 | 102 58 | 141 0  | 178 45 |
| 30 | 18 4  | 39 49 | 68 36 | 103 13 | 142 16 | 180 0  |



Ad latitudinem .40. Graduum

|    | ☿      | ♈      | ♉      | ♊      | ♋      | ♌      | ♍   |
|----|--------|--------|--------|--------|--------|--------|-----|
|    | ☿ m    | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m |
| 0  | 180 0  | 217 44 | 255 47 | 291 24 | 320 11 | 341 56 |     |
| 1  | 181 15 | 219 0  | 257 2  | 292 29 | 321 1  | 342 34 |     |
| 2  | 182 30 | 220 16 | 258 17 | 293 34 | 321 50 | 343 12 |     |
| 3  | 183 45 | 221 32 | 259 32 | 294 38 | 322 38 | 343 50 |     |
| 4  | 185 0  | 222 48 | 260 47 | 295 42 | 323 26 | 344 28 |     |
| 5  | 186 15 | 224 4  | 262 2  | 296 45 | 324 13 | 345 6  |     |
| 6  | 187 30 | 225 20 | 263 16 | 297 48 | 325 0  | 345 44 |     |
| 7  | 188 45 | 226 36 | 264 30 | 298 50 | 325 47 | 346 21 |     |
| 8  | 190 0  | 227 53 | 265 43 | 299 52 | 326 33 | 346 58 |     |
| 9  | 191 15 | 229 9  | 266 57 | 300 53 | 327 19 | 347 35 |     |
| 10 | 192 31 | 230 26 | 268 10 | 301 53 | 328 4  | 348 12 |     |
| 11 | 193 46 | 231 42 | 269 23 | 302 53 | 328 49 | 348 48 |     |
| 12 | 195 1  | 232 58 | 270 36 | 303 52 | 329 34 | 349 24 |     |
| 13 | 196 17 | 234 15 | 271 48 | 304 51 | 330 19 | 350 0  |     |
| 14 | 197 32 | 235 32 | 273 1  | 305 49 | 331 3  | 350 36 |     |
| 15 | 198 48 | 236 48 | 274 13 | 306 47 | 331 46 | 351 12 |     |
| 16 | 200 3  | 238 5  | 275 25 | 307 44 | 332 28 | 351 48 |     |
| 17 | 201 19 | 239 21 | 276 36 | 308 41 | 333 10 | 352 23 |     |
| 18 | 202 34 | 240 38 | 277 47 | 309 37 | 333 52 | 352 59 |     |
| 19 | 203 50 | 241 54 | 278 57 | 310 33 | 334 34 | 353 34 |     |
| 20 | 205 6  | 243 10 | 280 7  | 311 28 | 335 16 | 354 9  |     |
| 21 | 206 21 | 244 26 | 281 17 | 312 23 | 335 57 | 354 45 |     |
| 22 | 207 37 | 245 42 | 282 26 | 313 17 | 336 38 | 355 20 |     |
| 23 | 208 52 | 246 58 | 283 35 | 314 11 | 337 19 | 355 55 |     |
| 24 | 210 8  | 248 14 | 284 43 | 315 4  | 338 0  | 356 30 |     |
| 25 | 211 24 | 249 29 | 285 51 | 315 56 | 338 40 | 357 5  |     |
| 26 | 212 40 | 250 45 | 286 59 | 316 48 | 339 20 | 357 40 |     |
| 27 | 213 56 | 252 1  | 288 6  | 317 39 | 339 59 | 358 15 |     |
| 28 | 215 12 | 253 16 | 289 13 | 318 30 | 340 38 | 358 50 |     |
| 29 | 216 28 | 254 32 | 290 19 | 319 21 | 341 17 | 359 25 |     |
| 30 | 217 44 | 255 47 | 291 24 | 320 11 | 341 56 | 360 0  |     |



Tabula Ascensionum Obliquarum.

|    | $\gamma$ | $\delta$ | $\pi$ | $\epsilon$ | $\Omega$ | $\mu$  |
|----|----------|----------|-------|------------|----------|--------|
| S  | S m      | S m      | S m   | S m        | S m      | S m    |
| 0  | 0 0      | 17 43    | 39 9  | 67 47      | 103 33   | 141 55 |
| 1  | 0 34     | 18 21    | 39 53 | 68 53      | 104 49   | 143 12 |
| 2  | 1 8      | 18 59    | 40 48 | 69 59      | 106 5    | 144 29 |
| 3  | 1 42     | 19 38    | 41 39 | 71 6       | 107 21   | 145 45 |
| 4  | 2 16     | 20 16    | 42 30 | 72 13      | 108 37   | 147 2  |
| 5  | 2 51     | 20 55    | 43 22 | 73 21      | 109 53   | 148 18 |
| 6  | 3 25     | 21 34    | 44 14 | 74 29      | 111 9    | 149 35 |
| 7  | 3 59     | 22 14    | 45 7  | 75 38      | 112 25   | 150 52 |
| 8  | 4 34     | 22 54    | 46 0  | 76 47      | 113 42   | 152 8  |
| 9  | 5 8      | 23 34    | 46 53 | 77 56      | 114 58   | 153 25 |
| 10 | 5 43     | 24 15    | 47 47 | 79 6       | 116 15   | 154 41 |
| 11 | 6 18     | 24 56    | 48 42 | 80 17      | 117 32   | 155 58 |
| 12 | 6 53     | 25 38    | 49 38 | 81 28      | 118 49   | 157 14 |
| 13 | 7 28     | 26 19    | 50 34 | 82 39      | 120 6    | 158 30 |
| 14 | 8 3      | 27 1     | 51 30 | 83 49      | 121 23   | 159 46 |
| 15 | 8 38     | 27 43    | 52 27 | 85 1       | 122 40   | 161 2  |
| 16 | 9 13     | 28 26    | 53 25 | 86 13      | 123 57   | 162 18 |
| 17 | 9 48     | 29 10    | 54 23 | 87 26      | 125 14   | 163 34 |
| 18 | 10 24    | 29 53    | 55 22 | 88 39      | 126 31   | 164 50 |
| 19 | 10 59    | 30 37    | 56 21 | 89 52      | 127 48   | 166 6  |
| 20 | 11 35    | 31 21    | 57 20 | 91 5       | 129 5    | 167 21 |
| 21 | 12 11    | 32 6     | 58 20 | 92 19      | 130 22   | 168 37 |
| 22 | 12 47    | 32 52    | 59 21 | 93 33      | 131 39   | 169 53 |
| 23 | 13 23    | 33 37    | 60 22 | 94 47      | 132 57   | 171 9  |
| 24 | 13 59    | 34 23    | 61 24 | 96 1       | 134 14   | 172 25 |
| 25 | 14 36    | 35 9     | 62 27 | 97 16      | 135 31   | 173 41 |
| 26 | 15 13    | 35 56    | 63 30 | 98 31      | 136 48   | 174 57 |
| 27 | 15 50    | 36 44    | 64 34 | 99 46      | 138 5    | 176 13 |
| 28 | 16 28    | 37 32    | 65 38 | 101 2      | 139 22   | 177 29 |
| 29 | 17 5     | 38 20    | 66 42 | 102 17     | 140 39   | 178 45 |
| 30 | 17 43    | 39 9     | 67 47 | 103 33     | 141 55   | 180 0  |



Ad latitudinem .41. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      | ♎   |
|----|--------|--------|--------|--------|--------|--------|-----|
|    | S m    | S m    | S m    | S m    | S m    | S m    | S m |
| 0  | 180 0  | 218 5  | 256 27 | 292 13 | 320 51 | 342 17 |     |
| 1  | 181 15 | 219 21 | 257 43 | 293 18 | 321 40 | 342 55 |     |
| 2  | 182 31 | 220 38 | 258 58 | 294 22 | 322 28 | 343 32 |     |
| 3  | 183 47 | 221 55 | 260 14 | 295 26 | 323 16 | 344 10 |     |
| 4  | 185 3  | 223 12 | 261 29 | 296 30 | 324 4  | 344 47 |     |
| 5  | 186 19 | 224 29 | 262 44 | 297 33 | 324 51 | 345 24 |     |
| 6  | 187 35 | 225 46 | 263 59 | 298 36 | 325 37 | 346 1  |     |
| 7  | 188 51 | 227 3  | 265 13 | 299 38 | 326 23 | 346 37 |     |
| 8  | 190 7  | 228 21 | 266 27 | 300 39 | 327 8  | 347 13 |     |
| 9  | 191 23 | 229 38 | 267 41 | 301 40 | 327 54 | 347 49 |     |
| 10 | 192 39 | 230 55 | 268 55 | 302 40 | 328 39 | 348 25 |     |
| 11 | 193 54 | 232 12 | 270 8  | 303 39 | 329 23 | 349 1  |     |
| 12 | 195 10 | 233 29 | 271 21 | 304 38 | 330 7  | 349 36 |     |
| 13 | 196 26 | 234 46 | 272 34 | 305 37 | 330 50 | 350 12 |     |
| 14 | 197 42 | 236 3  | 273 47 | 306 35 | 331 34 | 350 47 |     |
| 15 | 198 58 | 237 20 | 274 59 | 307 33 | 332 17 | 351 22 |     |
| 16 | 200 14 | 238 37 | 276 11 | 308 30 | 332 59 | 351 57 |     |
| 17 | 201 30 | 239 54 | 277 21 | 309 26 | 333 41 | 352 32 |     |
| 18 | 202 46 | 241 11 | 278 32 | 310 22 | 334 22 | 353 7  |     |
| 19 | 204 2  | 242 28 | 279 43 | 311 18 | 335 4  | 353 42 |     |
| 20 | 205 19 | 243 45 | 280 54 | 312 13 | 335 45 | 354 17 |     |
| 21 | 206 35 | 245 2  | 282 4  | 313 7  | 336 26 | 354 52 |     |
| 22 | 207 52 | 246 18 | 283 13 | 314 0  | 337 6  | 355 26 |     |
| 23 | 209 8  | 247 35 | 284 22 | 314 53 | 337 46 | 356 1  |     |
| 24 | 210 25 | 248 51 | 285 31 | 315 46 | 338 36 | 356 35 |     |
| 25 | 211 42 | 250 7  | 286 39 | 316 38 | 339 5  | 357 9  |     |
| 26 | 212 58 | 251 23 | 287 47 | 317 30 | 339 44 | 357 44 |     |
| 27 | 214 15 | 252 39 | 288 54 | 318 21 | 340 22 | 358 18 |     |
| 28 | 215 31 | 253 55 | 290 1  | 319 12 | 341 1  | 358 52 |     |
| 29 | 216 48 | 255 11 | 291 7  | 320 2  | 341 59 | 359 26 |     |
| 30 | 218 5  | 256 27 | 292 13 | 320 51 | 342 17 | 360 0  |     |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε      | Ω      | np     |  |
|----|-------|-------|-------|--------|--------|--------|--|
| δ  | δ m   | δ m   | δ m   | δ m    | δ m    | δ m    |  |
| 0  | 0 0   | 17 21 | 38 27 | 66 57  | 102 51 | 141 33 |  |
| 1  | 0 33  | 17 58 | 39 16 | 68 3   | 104 7  | 142 51 |  |
| 2  | 1 6   | 18 36 | 40 6  | 69 9   | 105 24 | 144 8  |  |
| 3  | 1 40  | 19 13 | 40 56 | 70 16  | 106 40 | 145 26 |  |
| 4  | 2 13  | 19 51 | 41 46 | 71 23  | 107 57 | 146 43 |  |
| 5  | 2 47  | 20 29 | 42 37 | 72 31  | 109 14 | 148 0  |  |
| 6  | 3 20  | 21 8  | 43 28 | 73 39  | 110 31 | 149 18 |  |
| 7  | 3 54  | 21 48 | 44 20 | 74 47  | 111 48 | 150 35 |  |
| 8  | 4 28  | 22 27 | 45 13 | 75 56  | 113 5  | 151 52 |  |
| 9  | 5 2   | 23 6  | 46 7  | 77 6   | 114 22 | 153 9  |  |
| 10 | 5 36  | 23 46 | 47 1  | 78 16  | 115 40 | 154 26 |  |
| 11 | 6 10  | 24 26 | 47 56 | 79 27  | 116 57 | 155 43 |  |
| 12 | 6 44  | 25 7  | 48 51 | 80 38  | 118 15 | 157 0  |  |
| 13 | 7 18  | 25 48 | 49 47 | 81 50  | 119 32 | 158 17 |  |
| 14 | 7 52  | 26 29 | 50 43 | 83 1   | 120 50 | 159 34 |  |
| 15 | 8 26  | 27 10 | 51 39 | 84 13  | 122 8  | 160 50 |  |
| 16 | 9 0   | 27 52 | 52 36 | 85 26  | 123 25 | 162 7  |  |
| 17 | 9 35  | 28 35 | 53 34 | 86 39  | 124 43 | 163 24 |  |
| 18 | 10 10 | 29 18 | 54 32 | 87 52  | 126 0  | 164 41 |  |
| 19 | 10 45 | 30 2  | 55 31 | 89 5   | 127 18 | 165 58 |  |
| 20 | 11 20 | 30 46 | 56 30 | 90 19  | 128 36 | 167 24 |  |
| 21 | 11 55 | 31 30 | 57 30 | 91 33  | 129 54 | 168 31 |  |
| 22 | 12 31 | 32 15 | 58 31 | 92 47  | 131 12 | 169 48 |  |
| 23 | 13 6  | 33 0  | 59 32 | 94 2   | 132 30 | 171 4  |  |
| 24 | 13 42 | 33 45 | 60 34 | 95 16  | 133 48 | 172 21 |  |
| 25 | 14 18 | 34 30 | 61 37 | 96 31  | 135 5  | 173 37 |  |
| 26 | 14 54 | 35 16 | 62 40 | 97 47  | 136 23 | 174 54 |  |
| 27 | 15 31 | 36 3  | 63 44 | 99 3   | 137 41 | 176 11 |  |
| 28 | 16 7  | 36 50 | 64 48 | 100 19 | 138 52 | 177 27 |  |
| 29 | 16 44 | 37 38 | 65 52 | 101 35 | 140 16 | 178 44 |  |
| 30 | 17 21 | 38 27 | 66 57 | 102 51 | 141 33 | 180 0  |  |



Ad latitudinem .42. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♎  | ♏      | ♐      | ♑      | ♒      | ♓      | ♈      |
| 0  | 180 0  | 218 27 | 257 9  | 293 3  | 321 33 | 342 39 |
| 1  | 181 16 | 219 44 | 258 25 | 294 8  | 322 22 | 343 16 |
| 2  | 182 33 | 221 2  | 259 41 | 295 12 | 323 10 | 343 53 |
| 3  | 183 49 | 222 19 | 260 57 | 296 16 | 323 57 | 344 29 |
| 4  | 185 6  | 223 37 | 262 13 | 297 20 | 324 44 | 345 6  |
| 5  | 186 23 | 224 55 | 263 29 | 298 23 | 325 30 | 345 42 |
| 6  | 187 39 | 226 12 | 264 44 | 299 26 | 326 15 | 346 18 |
| 7  | 188 56 | 227 30 | 265 58 | 300 28 | 327 0  | 346 54 |
| 8  | 190 12 | 228 48 | 267 13 | 301 29 | 327 45 | 347 29 |
| 9  | 191 29 | 230 6  | 268 27 | 302 30 | 328 30 | 348 5  |
| 10 | 192 46 | 231 24 | 269 41 | 303 30 | 329 14 | 348 40 |
| 11 | 194 2  | 232 42 | 270 55 | 304 29 | 329 58 | 349 15 |
| 12 | 195 19 | 234 0  | 272 8  | 305 28 | 330 42 | 349 50 |
| 13 | 196 36 | 235 17 | 273 21 | 306 26 | 331 25 | 350 25 |
| 14 | 197 53 | 236 35 | 274 34 | 307 24 | 332 8  | 351 0  |
| 15 | 199 10 | 237 52 | 275 47 | 308 21 | 332 50 | 351 34 |
| 16 | 200 26 | 239 10 | 276 59 | 309 17 | 333 31 | 352 8  |
| 17 | 201 43 | 240 28 | 278 10 | 310 13 | 334 12 | 352 32 |
| 18 | 203 0  | 241 45 | 279 22 | 311 9  | 334 53 | 353 16 |
| 19 | 204 17 | 243 3  | 280 33 | 312 4  | 335 34 | 353 50 |
| 20 | 205 34 | 244 20 | 281 44 | 312 59 | 336 14 | 354 24 |
| 21 | 206 51 | 245 38 | 282 54 | 313 53 | 336 54 | 354 58 |
| 22 | 208 8  | 246 55 | 284 4  | 314 47 | 337 33 | 355 32 |
| 23 | 209 25 | 248 12 | 285 13 | 315 40 | 338 12 | 356 6  |
| 24 | 210 42 | 249 29 | 286 21 | 316 32 | 338 52 | 356 40 |
| 25 | 212 0  | 250 46 | 287 29 | 317 23 | 339 31 | 357 13 |
| 26 | 213 17 | 252 3  | 288 37 | 318 14 | 340 9  | 357 47 |
| 27 | 214 34 | 253 20 | 289 44 | 319 4  | 340 47 | 358 20 |
| 28 | 215 52 | 254 36 | 290 51 | 319 54 | 341 24 | 358 54 |
| 29 | 217 9  | 255 53 | 291 57 | 320 44 | 342 2  | 359 27 |
| 30 | 218 27 | 257 9  | 293 3  | 321 33 | 342 39 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 16 58 | 37 44 | 66 5   | 102 8  | 141 10 |
| 1  | 0 32  | 17 35 | 38 32 | 67 5   | 103 25 | 142 29 |
| 2  | 1 5   | 18 12 | 39 22 | 68 17  | 104 42 | 143 47 |
| 3  | 1 38  | 18 49 | 40 12 | 69 24  | 105 59 | 145 5  |
| 4  | 2 11  | 19 26 | 41 2  | 70 31  | 107 16 | 146 23 |
| 5  | 2 44  | 20 3  | 41 52 | 71 39  | 108 34 | 147 41 |
| 6  | 3 16  | 20 41 | 42 43 | 72 47  | 109 51 | 148 59 |
| 7  | 3 49  | 21 20 | 43 35 | 73 55  | 111 9  | 150 17 |
| 8  | 4 22  | 21 58 | 44 27 | 75 4   | 112 27 | 151 35 |
| 9  | 4 55  | 22 37 | 45 20 | 76 14  | 113 45 | 152 53 |
| 10 | 5 28  | 23 16 | 46 13 | 77 25  | 115 3  | 154 10 |
| 11 | 6 1   | 23 56 | 47 7  | 78 36  | 116 21 | 155 28 |
| 12 | 6 34  | 24 36 | 48 2  | 79 48  | 117 39 | 156 46 |
| 13 | 7 8   | 25 16 | 48 57 | 80 59  | 118 58 | 158 4  |
| 14 | 7 41  | 25 56 | 49 53 | 82 11  | 120 16 | 159 22 |
| 15 | 8 15  | 26 37 | 50 49 | 83 23  | 121 35 | 160 39 |
| 16 | 8 48  | 27 19 | 51 46 | 84 36  | 122 53 | 161 56 |
| 17 | 9 22  | 28 1  | 52 44 | 85 50  | 124 11 | 163 13 |
| 18 | 9 56  | 28 44 | 53 42 | 87 4   | 125 29 | 164 31 |
| 19 | 10 30 | 29 26 | 54 40 | 88 17  | 126 47 | 165 48 |
| 20 | 11 4  | 30 9  | 55 39 | 89 31  | 128 6  | 167 6  |
| 21 | 11 39 | 30 53 | 56 39 | 90 46  | 129 25 | 168 23 |
| 22 | 12 14 | 31 37 | 57 40 | 92 1   | 130 43 | 169 41 |
| 23 | 12 49 | 32 21 | 58 41 | 93 16  | 132 2  | 170 58 |
| 24 | 13 24 | 33 5  | 59 43 | 94 31  | 133 21 | 172 16 |
| 25 | 13 54 | 33 50 | 60 45 | 95 46  | 134 39 | 173 34 |
| 26 | 14 34 | 34 35 | 61 48 | 97 2   | 135 58 | 174 51 |
| 27 | 15 10 | 35 21 | 62 51 | 98 18  | 137 16 | 176 8  |
| 28 | 15 46 | 36 8  | 63 55 | 99 35  | 138 34 | 177 25 |
| 29 | 16 22 | 36 56 | 65 0  | 100 51 | 139 52 | 178 42 |
| 30 | 16 58 | 37 44 | 66 5  | 102 8  | 141 10 | 180 0  |



Ad latitudinem .43. Graduum.

| D  | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| D  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 218 50 | 257 52 | 293 55 | 322 16 | 343 2  |
| 1  | 181 18 | 220 8  | 259 9  | 295 0  | 323 4  | 343 38 |
| 2  | 182 35 | 221 26 | 260 25 | 296 5  | 323 52 | 344 14 |
| 3  | 183 52 | 222 44 | 261 42 | 297 9  | 324 39 | 344 50 |
| 4  | 185 9  | 224 2  | 262 58 | 298 12 | 325 25 | 345 26 |
| 5  | 186 26 | 225 21 | 264 14 | 299 15 | 326 10 | 346 1  |
| 6  | 187 44 | 226 39 | 265 29 | 300 17 | 326 55 | 346 36 |
| 7  | 189 2  | 227 58 | 266 44 | 301 19 | 327 39 | 347 11 |
| 8  | 190 19 | 229 17 | 267 59 | 302 20 | 328 23 | 347 46 |
| 9  | 191 37 | 230 35 | 269 14 | 303 21 | 329 7  | 348 21 |
| 10 | 192 54 | 231 54 | 270 29 | 304 21 | 329 51 | 348 56 |
| 11 | 194 12 | 233 13 | 271 43 | 305 20 | 330 34 | 349 30 |
| 12 | 195 29 | 234 31 | 272 56 | 306 18 | 331 16 | 350 4  |
| 13 | 196 47 | 235 49 | 274 10 | 307 16 | 331 59 | 350 38 |
| 14 | 198 4  | 237 7  | 275 24 | 308 14 | 332 41 | 351 12 |
| 15 | 199 21 | 238 25 | 276 37 | 309 11 | 333 23 | 351 45 |
| 16 | 200 38 | 239 40 | 277 49 | 310 7  | 334 4  | 352 19 |
| 17 | 201 56 | 241 2  | 279 1  | 311 3  | 334 44 | 352 52 |
| 18 | 203 14 | 242 21 | 280 12 | 311 58 | 335 24 | 353 26 |
| 19 | 204 32 | 243 39 | 281 24 | 312 53 | 336 4  | 353 59 |
| 20 | 205 50 | 244 57 | 282 35 | 313 47 | 336 44 | 354 32 |
| 21 | 207 7  | 246 15 | 283 46 | 314 40 | 337 23 | 355 5  |
| 22 | 208 25 | 247 33 | 284 56 | 315 33 | 338 2  | 355 38 |
| 23 | 209 43 | 248 51 | 286 5  | 316 25 | 338 40 | 356 11 |
| 24 | 211 1  | 250 9  | 287 13 | 317 17 | 339 19 | 356 44 |
| 25 | 212 19 | 251 26 | 288 21 | 318 8  | 339 57 | 357 16 |
| 26 | 213 37 | 252 44 | 289 29 | 318 58 | 340 34 | 357 49 |
| 27 | 214 55 | 254 1  | 290 36 | 319 48 | 341 11 | 358 22 |
| 28 | 216 13 | 255 18 | 291 43 | 320 38 | 341 48 | 358 55 |
| 29 | 217 31 | 256 35 | 292 49 | 321 27 | 342 25 | 359 28 |
| 30 | 218 50 | 257 52 | 293 55 | 322 16 | 343 2  | 360 0  |



# Tabula Ascensionum Obliquarum

|    | V     | γ     | π     | ♄      | ♅      | np     |
|----|-------|-------|-------|--------|--------|--------|
| ♈  | ♈ m   | ♈ m   | ♈ m   | ♈ m    | ♈ m    | ♈ m    |
| 0  | 0 0   | 16 34 | 36 59 | 65 10  | 101 23 | 140 46 |
| 1  | 0 32  | 17 10 | 37 47 | 66 15  | 102 40 | 142 5  |
| 2  | 1 4   | 17 46 | 38 36 | 67 21  | 103 56 | 143 24 |
| 3  | 1 36  | 18 22 | 39 25 | 68 28  | 105 16 | 144 43 |
| 4  | 2 8   | 18 58 | 40 14 | 69 36  | 106 34 | 146 2  |
| 5  | 2 40  | 19 35 | 41 4  | 70 44  | 107 52 | 147 21 |
| 6  | 3 12  | 20 12 | 41 55 | 71 53  | 109 10 | 148 40 |
| 7  | 3 44  | 20 50 | 42 46 | 73 2   | 110 28 | 149 59 |
| 8  | 4 16  | 21 28 | 43 38 | 74 12  | 111 47 | 151 18 |
| 9  | 4 48  | 22 6  | 44 30 | 75 22  | 113 5  | 152 37 |
| 10 | 5 20  | 22 45 | 45 23 | 76 32  | 114 24 | 153 55 |
| 11 | 5 52  | 23 24 | 46 17 | 77 43  | 115 43 | 155 14 |
| 12 | 6 35  | 24 3  | 47 11 | 78 54  | 117 2  | 156 32 |
| 13 | 6 57  | 24 43 | 48 6  | 80 6   | 118 21 | 157 51 |
| 14 | 7 30  | 25 22 | 49 1  | 81 18  | 119 41 | 159 9  |
| 15 | 8 3   | 26 2  | 49 57 | 82 31  | 121 0  | 160 27 |
| 16 | 8 36  | 26 43 | 50 53 | 83 44  | 122 19 | 161 46 |
| 17 | 9 9   | 27 25 | 51 50 | 84 58  | 123 38 | 163 4  |
| 18 | 9 42  | 28 6  | 52 48 | 86 12  | 124 57 | 164 22 |
| 19 | 10 15 | 28 48 | 53 47 | 87 26  | 126 16 | 165 40 |
| 20 | 10 49 | 29 30 | 54 46 | 88 41  | 127 35 | 166 58 |
| 21 | 11 23 | 30 13 | 55 45 | 89 56  | 128 54 | 168 17 |
| 22 | 11 57 | 30 57 | 56 45 | 91 11  | 130 13 | 169 35 |
| 23 | 12 31 | 31 40 | 57 46 | 92 27  | 131 33 | 170 54 |
| 24 | 13 5  | 32 24 | 58 48 | 93 42  | 132 52 | 172 12 |
| 25 | 13 39 | 33 8  | 59 50 | 94 58  | 134 11 | 173 30 |
| 26 | 14 14 | 33 53 | 60 53 | 96 15  | 135 30 | 174 48 |
| 27 | 14 49 | 34 39 | 61 57 | 97 32  | 136 49 | 176 6  |
| 28 | 15 24 | 35 25 | 63 1  | 98 49  | 138 8  | 177 24 |
| 29 | 15 59 | 36 12 | 64 6  | 100 6  | 139 27 | 178 42 |
| 30 | 16 34 | 36 56 | 65 10 | 101 23 | 140 46 | 180 0  |



Ad latitudinem .44. Graduum

|    | ☿      | ♈      | ♉      | ♊      | ♋      | ♌      | ♍   |
|----|--------|--------|--------|--------|--------|--------|-----|
| S  | S m    | S m    | S m    | S m    | S m    | S m    | S m |
| 0  | 180 0  | 219 14 | 258 37 | 294 50 | 323 1  | 343 26 |     |
| 1  | 181 18 | 220 33 | 259 54 | 295 55 | 323 48 | 344 1  |     |
| 2  | 182 36 | 221 52 | 261 11 | 296 59 | 324 35 | 344 36 |     |
| 3  | 183 54 | 223 11 | 262 28 | 298 3  | 325 21 | 345 11 |     |
| 4  | 185 12 | 224 30 | 263 45 | 299 7  | 326 7  | 345 46 |     |
| 5  | 186 30 | 225 49 | 265 2  | 300 10 | 326 52 | 346 21 |     |
| 6  | 187 48 | 227 8  | 266 18 | 301 12 | 327 36 | 346 55 |     |
| 7  | 189 6  | 228 27 | 267 33 | 302 14 | 328 20 | 347 29 |     |
| 8  | 190 25 | 229 47 | 268 49 | 303 15 | 329 3  | 348 3  |     |
| 9  | 191 43 | 231 6  | 270 4  | 304 15 | 329 47 | 348 37 |     |
| 10 | 193 2  | 232 25 | 271 19 | 305 14 | 330 30 | 349 11 |     |
| 11 | 194 20 | 233 44 | 272 34 | 306 13 | 331 12 | 349 45 |     |
| 12 | 195 38 | 235 3  | 273 48 | 307 12 | 331 54 | 350 18 |     |
| 13 | 196 56 | 236 22 | 275 2  | 308 10 | 332 35 | 350 51 |     |
| 14 | 198 14 | 237 41 | 276 16 | 309 7  | 333 17 | 351 24 |     |
| 15 | 199 33 | 239 0  | 277 29 | 310 3  | 333 58 | 351 57 |     |
| 16 | 200 51 | 240 19 | 278 42 | 310 59 | 334 38 | 352 30 |     |
| 17 | 202 9  | 241 39 | 279 54 | 311 54 | 335 17 | 353 3  |     |
| 18 | 203 28 | 242 58 | 281 6  | 312 49 | 335 57 | 353 35 |     |
| 19 | 204 46 | 244 17 | 282 17 | 313 43 | 336 36 | 354 8  |     |
| 20 | 206 5  | 245 36 | 283 28 | 314 37 | 337 15 | 354 40 |     |
| 21 | 207 23 | 246 55 | 284 38 | 315 30 | 337 54 | 355 12 |     |
| 22 | 208 42 | 248 13 | 285 48 | 316 22 | 338 32 | 355 44 |     |
| 23 | 210 1  | 249 32 | 286 58 | 317 14 | 339 10 | 356 16 |     |
| 24 | 211 20 | 250 50 | 288 7  | 318 5  | 339 48 | 356 48 |     |
| 25 | 212 39 | 252 8  | 289 16 | 318 56 | 340 25 | 357 20 |     |
| 26 | 213 58 | 253 26 | 290 24 | 319 46 | 341 2  | 357 52 |     |
| 27 | 215 17 | 254 44 | 291 32 | 320 35 | 341 38 | 358 24 |     |
| 28 | 216 36 | 256 2  | 292 39 | 321 24 | 342 14 | 358 56 |     |
| 29 | 217 55 | 257 20 | 293 45 | 322 13 | 342 50 | 359 28 |     |
| 30 | 219 14 | 258 37 | 294 50 | 323 1  | 343 26 | 360 0  |     |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε      | ζ      | η      |
|----|-------|-------|-------|--------|--------|--------|
| h  | h m   | h m   | h m   | h m    | h m    | h m    |
| 0  | 0 0   | 16 10 | 36 13 | 64 14  | 100 37 | 140 22 |
| 1  | 0 31  | 16 45 | 37 0  | 65 20  | 101 55 | 141 42 |
| 2  | 1 2   | 17 20 | 37 48 | 66 26  | 103 13 | 143 2  |
| 3  | 1 33  | 17 56 | 38 36 | 67 33  | 104 32 | 144 21 |
| 4  | 2 4   | 18 31 | 39 25 | 68 40  | 105 50 | 145 41 |
| 5  | 2 35  | 19 7  | 40 15 | 69 48  | 107 9  | 147 0  |
| 6  | 3 6   | 19 43 | 41 5  | 70 56  | 108 28 | 148 20 |
| 7  | 3 37  | 20 20 | 41 56 | 72 5   | 109 47 | 149 40 |
| 8  | 4 9   | 20 57 | 42 47 | 73 15  | 111 6  | 150 59 |
| 9  | 4 40  | 21 34 | 43 39 | 74 25  | 112 25 | 152 19 |
| 10 | 5 12  | 22 12 | 44 31 | 75 36  | 113 44 | 153 38 |
| 11 | 5 43  | 22 50 | 45 24 | 76 48  | 115 3  | 154 58 |
| 12 | 6 15  | 23 29 | 46 18 | 78 0   | 116 23 | 156 17 |
| 13 | 6 47  | 24 8  | 47 12 | 79 12  | 117 42 | 157 37 |
| 14 | 7 19  | 24 47 | 48 7  | 80 24  | 119 2  | 158 56 |
| 15 | 7 51  | 25 26 | 49 3  | 81 37  | 120 22 | 160 15 |
| 16 | 8 33  | 26 6  | 49 59 | 82 51  | 121 42 | 161 34 |
| 17 | 8 55  | 26 47 | 50 56 | 84 5   | 123 2  | 162 53 |
| 18 | 9 27  | 27 28 | 51 53 | 85 20  | 124 22 | 164 12 |
| 19 | 9 59  | 28 9  | 52 51 | 86 34  | 125 42 | 165 31 |
| 20 | 10 32 | 28 50 | 53 50 | 87 49  | 127 2  | 166 50 |
| 21 | 11 5  | 29 32 | 54 49 | 89 4   | 128 22 | 168 9  |
| 22 | 11 38 | 30 15 | 55 49 | 90 20  | 129 42 | 169 28 |
| 23 | 12 11 | 30 58 | 56 50 | 91 36  | 131 3  | 170 47 |
| 24 | 12 44 | 31 41 | 57 52 | 92 52  | 132 23 | 172 6  |
| 25 | 13 18 | 32 25 | 58 54 | 94 9   | 133 43 | 173 25 |
| 26 | 13 52 | 33 10 | 59 57 | 95 26  | 135 3  | 174 44 |
| 27 | 14 26 | 33 56 | 61 0  | 96 44  | 136 23 | 176 3  |
| 28 | 15 1  | 34 41 | 62 4  | 98 1   | 137 43 | 177 22 |
| 29 | 15 35 | 35 21 | 63 9  | 99 19  | 139 3  | 178 41 |
| 30 | 16 10 | 36 13 | 64 14 | 100 37 | 140 22 | 180 0  |



Ad latitudinem .45. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 219 38 | 259 23 | 295 46 | 323 47 | 343 50 |
| 1  | 181 19 | 220 57 | 260 41 | 296 51 | 324 33 | 344 25 |
| 2  | 182 38 | 222 17 | 261 59 | 297 56 | 325 19 | 344 59 |
| 3  | 183 57 | 223 37 | 263 16 | 299 0  | 326 4  | 345 34 |
| 4  | 185 16 | 224 57 | 264 34 | 300 3  | 326 50 | 346 8  |
| 5  | 186 35 | 226 17 | 265 51 | 301 6  | 327 35 | 346 42 |
| 6  | 187 54 | 227 37 | 267 8  | 302 8  | 328 19 | 347 16 |
| 7  | 189 13 | 228 57 | 268 24 | 303 10 | 329 2  | 347 49 |
| 8  | 190 32 | 230 18 | 269 40 | 304 11 | 329 45 | 348 22 |
| 9  | 191 51 | 231 38 | 270 56 | 305 11 | 330 28 | 348 55 |
| 10 | 193 10 | 232 58 | 272 11 | 306 10 | 331 10 | 349 28 |
| 11 | 194 29 | 234 18 | 273 26 | 307 9  | 331 51 | 350 1  |
| 12 | 195 48 | 235 38 | 274 40 | 308 7  | 332 32 | 350 33 |
| 13 | 197 7  | 236 58 | 275 55 | 309 4  | 333 13 | 351 5  |
| 14 | 198 26 | 238 18 | 277 9  | 310 1  | 333 54 | 351 37 |
| 15 | 199 45 | 239 38 | 278 23 | 310 57 | 334 34 | 352 9  |
| 16 | 201 4  | 240 58 | 279 36 | 311 53 | 335 13 | 352 41 |
| 17 | 202 23 | 242 18 | 280 48 | 312 48 | 335 52 | 353 13 |
| 18 | 203 43 | 243 37 | 282 0  | 313 42 | 336 31 | 353 45 |
| 19 | 205 2  | 244 57 | 283 12 | 314 36 | 337 10 | 354 17 |
| 20 | 206 22 | 246 16 | 284 24 | 315 29 | 337 48 | 354 48 |
| 21 | 207 41 | 247 35 | 285 35 | 316 21 | 338 26 | 355 20 |
| 22 | 209 1  | 248 54 | 286 45 | 317 13 | 339 3  | 355 51 |
| 23 | 210 20 | 250 13 | 287 55 | 318 4  | 339 40 | 356 23 |
| 24 | 211 40 | 251 32 | 289 4  | 318 55 | 340 17 | 356 54 |
| 25 | 213 0  | 252 51 | 290 12 | 319 45 | 340 53 | 357 25 |
| 26 | 214 19 | 254 10 | 291 20 | 320 35 | 341 29 | 347 56 |
| 27 | 215 39 | 255 28 | 292 27 | 321 24 | 342 4  | 358 27 |
| 28 | 216 58 | 256 47 | 293 34 | 322 12 | 342 40 | 358 58 |
| 29 | 218 18 | 258 5  | 294 40 | 323 0  | 343 15 | 359 29 |
| 30 | 219 38 | 259 23 | 295 46 | 323 47 | 343 50 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ     | η      | ι      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 15 44 | 35 24 | 63 14 | 99 48  | 139 56 |
| 1  | 0 30  | 16 18 | 36 11 | 64 20 | 101 7  | 141 17 |
| 2  | 1 0   | 16 53 | 36 58 | 65 27 | 102 26 | 142 38 |
| 3  | 1 30  | 17 27 | 37 46 | 66 34 | 103 45 | 143 58 |
| 4  | 2 0   | 18 2  | 38 34 | 67 41 | 105 4  | 145 19 |
| 5  | 2 31  | 18 37 | 39 23 | 68 49 | 106 24 | 146 39 |
| 6  | 3 1   | 19 13 | 40 12 | 69 58 | 107 43 | 148 0  |
| 7  | 3 32  | 19 49 | 41 2  | 71 8  | 109 3  | 149 20 |
| 8  | 4 2   | 20 26 | 41 53 | 72 18 | 110 23 | 150 41 |
| 9  | 4 33  | 21 2  | 42 45 | 73 28 | 111 43 | 152 1  |
| 10 | 5 4   | 21 39 | 43 37 | 74 39 | 113 3  | 153 21 |
| 11 | 5 34  | 22 16 | 44 30 | 75 51 | 114 23 | 154 42 |
| 12 | 6 5   | 22 54 | 45 24 | 77 3  | 115 44 | 156 2  |
| 13 | 6 36  | 23 32 | 46 18 | 78 16 | 117 4  | 157 22 |
| 14 | 7 7   | 24 10 | 47 12 | 79 28 | 118 25 | 158 42 |
| 15 | 7 38  | 24 48 | 48 7  | 80 41 | 119 46 | 160 2  |
| 16 | 8 9   | 25 27 | 49 3  | 81 55 | 121 6  | 161 22 |
| 17 | 8 40  | 26 7  | 50 0  | 83 10 | 122 27 | 162 42 |
| 18 | 9 12  | 26 47 | 50 57 | 84 25 | 123 47 | 164 2  |
| 19 | 9 43  | 27 28 | 51 55 | 85 40 | 125 8  | 165 22 |
| 20 | 10 15 | 28 9  | 52 53 | 86 55 | 126 29 | 166 42 |
| 21 | 10 47 | 28 51 | 53 52 | 88 11 | 127 50 | 168 2  |
| 22 | 11 19 | 29 33 | 54 52 | 89 27 | 129 10 | 169 22 |
| 23 | 11 52 | 30 15 | 55 52 | 90 44 | 130 31 | 170 42 |
| 24 | 12 24 | 30 57 | 56 53 | 92 0  | 131 52 | 172 2  |
| 25 | 12 57 | 31 40 | 57 55 | 93 17 | 133 13 | 173 21 |
| 26 | 13 30 | 32 23 | 58 57 | 94 35 | 134 34 | 174 41 |
| 27 | 14 3  | 33 7  | 60 0  | 95 53 | 135 55 | 176 1  |
| 28 | 14 37 | 33 52 | 61 4  | 97 11 | 137 15 | 177 21 |
| 29 | 15 10 | 34 38 | 62 9  | 98 29 | 138 36 | 178 41 |
| 30 | 15 44 | 35 24 | 63 14 | 99 48 | 139 56 | 180 0  |



Ad latitudinem .46. Graduum

|    | n   |    | m   |    | T   |    | S   |    | Σ   |    | X   |    |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
|    | B   | m  | B   | m  | B   | m  | B   | m  | B   | m  | B   | m  |
| 0  | 180 | 0  | 220 | 4  | 260 | 12 | 296 | 46 | 324 | 36 | 344 | 16 |
| 1  | 181 | 19 | 221 | 24 | 261 | 31 | 297 | 51 | 325 | 22 | 344 | 50 |
| 2  | 182 | 39 | 222 | 45 | 262 | 49 | 298 | 56 | 326 | 8  | 345 | 23 |
| 3  | 183 | 59 | 224 | 5  | 264 | 7  | 300 | 0  | 326 | 43 | 345 | 57 |
| 4  | 185 | 19 | 225 | 26 | 265 | 25 | 301 | 3  | 327 | 37 | 346 | 30 |
| 5  | 186 | 39 | 226 | 47 | 266 | 43 | 302 | 5  | 328 | 20 | 347 | 3  |
| 6  | 187 | 58 | 228 | 8  | 268 | 0  | 303 | 7  | 329 | 3  | 347 | 36 |
| 7  | 189 | 18 | 229 | 29 | 269 | 16 | 304 | 8  | 329 | 45 | 348 | 8  |
| 8  | 190 | 38 | 230 | 50 | 270 | 33 | 305 | 8  | 330 | 27 | 348 | 41 |
| 9  | 191 | 58 | 232 | 10 | 271 | 49 | 306 | 8  | 331 | 9  | 349 | 13 |
| 10 | 193 | 18 | 233 | 31 | 273 | 5  | 307 | 7  | 331 | 51 | 349 | 45 |
| 11 | 194 | 38 | 234 | 52 | 274 | 20 | 308 | 5  | 332 | 32 | 350 | 17 |
| 12 | 195 | 58 | 236 | 13 | 275 | 35 | 309 | 3  | 333 | 13 | 350 | 48 |
| 13 | 197 | 18 | 237 | 33 | 276 | 50 | 310 | 0  | 333 | 53 | 351 | 20 |
| 14 | 198 | 38 | 238 | 54 | 278 | 5  | 310 | 57 | 334 | 33 | 351 | 51 |
| 15 | 199 | 58 | 240 | 14 | 279 | 19 | 311 | 53 | 335 | 12 | 352 | 22 |
| 16 | 201 | 18 | 241 | 35 | 280 | 32 | 312 | 48 | 335 | 50 | 352 | 53 |
| 17 | 202 | 38 | 242 | 56 | 281 | 44 | 313 | 42 | 336 | 28 | 353 | 24 |
| 18 | 203 | 58 | 244 | 16 | 282 | 57 | 314 | 36 | 337 | 6  | 353 | 55 |
| 19 | 205 | 18 | 245 | 37 | 284 | 9  | 315 | 30 | 337 | 44 | 354 | 26 |
| 20 | 206 | 39 | 246 | 57 | 285 | 21 | 316 | 23 | 338 | 21 | 354 | 56 |
| 21 | 207 | 59 | 248 | 17 | 286 | 32 | 317 | 15 | 338 | 58 | 355 | 27 |
| 22 | 209 | 19 | 249 | 37 | 287 | 42 | 318 | 7  | 339 | 34 | 355 | 58 |
| 23 | 210 | 40 | 250 | 57 | 288 | 52 | 318 | 58 | 340 | 11 | 356 | 28 |
| 24 | 212 | 0  | 252 | 17 | 290 | 2  | 319 | 48 | 340 | 47 | 356 | 59 |
| 25 | 213 | 21 | 253 | 36 | 291 | 11 | 320 | 37 | 341 | 23 | 357 | 29 |
| 26 | 214 | 41 | 254 | 56 | 292 | 19 | 321 | 26 | 341 | 58 | 358 | 0  |
| 27 | 216 | 2  | 256 | 15 | 293 | 26 | 322 | 14 | 342 | 33 | 358 | 30 |
| 28 | 217 | 22 | 257 | 34 | 294 | 33 | 323 | 2  | 343 | 7  | 359 | 0  |
| 29 | 218 | 43 | 258 | 53 | 295 | 40 | 323 | 49 | 343 | 42 | 359 | 30 |
| 30 | 220 | 4  | 260 | 12 | 296 | 46 | 324 | 36 | 344 | 16 | 360 | 0  |

R 1



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ♄     | ♅      | ♆      |
|----|-------|-------|-------|-------|--------|--------|
| ♈  | ♈ m   | ♈ m   | ♈ m   | ♈ m   | ♈ m    | ♈ m    |
| 0  | 0 0   | 15 18 | 34 34 | 62 12 | 98 58  | 139 30 |
| 1  | 0 29  | 15 51 | 35 20 | 63 18 | 100 17 | 140 52 |
| 2  | 0 58  | 16 25 | 36 7  | 64 25 | 101 37 | 142 13 |
| 3  | 1 28  | 16 58 | 36 54 | 65 32 | 102 57 | 143 35 |
| 4  | 1 57  | 17 32 | 37 41 | 66 40 | 104 17 | 144 56 |
| 5  | 2 27  | 18 6  | 38 29 | 67 48 | 105 37 | 146 17 |
| 6  | 2 56  | 18 41 | 39 18 | 68 57 | 106 57 | 147 39 |
| 7  | 3 26  | 19 17 | 40 8  | 70 6  | 108 18 | 149 0  |
| 8  | 3 55  | 19 52 | 40 58 | 71 16 | 109 38 | 150 22 |
| 9  | 4 25  | 20 28 | 41 49 | 72 27 | 110 59 | 151 43 |
| 10 | 4 55  | 21 4  | 42 40 | 73 38 | 112 20 | 153 4  |
| 11 | 5 25  | 21 40 | 43 32 | 74 50 | 113 41 | 154 25 |
| 12 | 5 55  | 22 17 | 44 25 | 76 2  | 115 2  | 155 46 |
| 13 | 6 25  | 22 54 | 45 19 | 77 15 | 116 24 | 157 7  |
| 14 | 6 55  | 23 31 | 46 13 | 78 28 | 117 45 | 158 28 |
| 15 | 7 25  | 24 9  | 47 8  | 79 42 | 119 7  | 159 49 |
| 16 | 7 55  | 24 47 | 48 3  | 80 56 | 120 28 | 161 10 |
| 17 | 8 26  | 25 26 | 48 59 | 82 11 | 121 49 | 162 31 |
| 18 | 8 56  | 26 5  | 49 56 | 83 26 | 123 11 | 163 52 |
| 19 | 9 27  | 26 45 | 50 54 | 84 42 | 124 32 | 165 13 |
| 20 | 9 58  | 27 26 | 51 52 | 85 58 | 125 54 | 166 33 |
| 21 | 10 29 | 28 7  | 52 51 | 87 14 | 127 15 | 167 54 |
| 22 | 11 0  | 28 48 | 53 51 | 88 31 | 128 37 | 169 15 |
| 23 | 11 32 | 29 30 | 54 51 | 89 48 | 129 58 | 170 36 |
| 24 | 12 3  | 30 11 | 55 52 | 91 5  | 131 20 | 171 57 |
| 25 | 12 35 | 30 53 | 56 54 | 92 23 | 132 42 | 173 17 |
| 26 | 13 7  | 31 36 | 57 56 | 93 42 | 134 4  | 174 38 |
| 27 | 13 40 | 32 20 | 58 59 | 95 1  | 135 26 | 175 59 |
| 28 | 14 12 | 33 4  | 60 3  | 96 20 | 136 47 | 177 19 |
| 29 | 14 45 | 33 49 | 61 7  | 97 39 | 138 9  | 178 40 |
| 30 | 15 18 | 34 34 | 62 12 | 98 58 | 139 30 | 180 0  |



Ad latitudinem .47. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| S  | S m    | S m    | S m    | S m    | S m    | S m    |
| 0  | 180 0  | 220 30 | 261 2  | 297 48 | 325 26 | 344 42 |
| 1  | 181 20 | 221 51 | 262 21 | 298 53 | 326 11 | 345 15 |
| 2  | 182 41 | 223 13 | 263 40 | 299 57 | 326 56 | 345 48 |
| 3  | 184 1  | 224 34 | 264 59 | 301 1  | 327 40 | 346 20 |
| 4  | 185 22 | 225 56 | 266 18 | 302 4  | 328 24 | 346 53 |
| 5  | 186 43 | 227 18 | 267 37 | 303 6  | 329 7  | 347 25 |
| 6  | 188 3  | 228 40 | 268 55 | 304 8  | 329 49 | 347 57 |
| 7  | 189 24 | 230 2  | 270 12 | 305 9  | 330 30 | 348 28 |
| 8  | 190 45 | 231 23 | 271 29 | 306 9  | 331 12 | 349 0  |
| 9  | 192 6  | 232 45 | 272 46 | 307 9  | 331 53 | 349 31 |
| 10 | 193 27 | 234 6  | 274 2  | 308 8  | 332 34 | 350 2  |
| 11 | 194 47 | 235 28 | 275 18 | 309 6  | 333 15 | 350 33 |
| 12 | 196 8  | 236 49 | 276 34 | 310 4  | 333 55 | 351 4  |
| 13 | 197 29 | 238 11 | 277 49 | 311 1  | 334 34 | 351 34 |
| 14 | 198 50 | 239 32 | 279 4  | 311 57 | 335 13 | 352 5  |
| 15 | 200 11 | 240 53 | 280 18 | 312 52 | 335 51 | 352 35 |
| 16 | 201 32 | 242 15 | 281 32 | 313 47 | 336 29 | 353 5  |
| 17 | 202 53 | 243 36 | 282 45 | 314 41 | 337 6  | 353 35 |
| 18 | 204 14 | 244 58 | 283 58 | 315 35 | 337 43 | 354 5  |
| 19 | 205 35 | 246 19 | 285 10 | 316 28 | 338 20 | 354 35 |
| 20 | 206 56 | 247 40 | 286 22 | 317 20 | 338 56 | 355 5  |
| 21 | 208 17 | 249 1  | 287 33 | 318 11 | 339 32 | 355 35 |
| 22 | 209 38 | 250 22 | 288 44 | 319 2  | 340 8  | 356 5  |
| 23 | 211 0  | 251 42 | 289 54 | 319 52 | 340 43 | 356 34 |
| 24 | 212 21 | 253 3  | 291 3  | 320 42 | 341 19 | 357 4  |
| 25 | 213 43 | 254 23 | 292 12 | 321 31 | 341 54 | 357 33 |
| 26 | 215 4  | 255 43 | 293 20 | 322 19 | 342 28 | 358 3  |
| 27 | 216 25 | 257 3  | 294 28 | 323 6  | 343 2  | 358 32 |
| 28 | 217 47 | 258 23 | 295 35 | 323 53 | 343 35 | 359 2  |
| 29 | 219 8  | 259 43 | 296 42 | 324 40 | 344 9  | 359 31 |
| 30 | 220 30 | 261 2  | 297 48 | 325 26 | 344 42 | 360 0  |

DK 2



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε     | Ω      | np     |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 14 50 | 33 41 | 61 7  | 98 5   | 139 2  |
| 1  | 0 28  | 15 23 | 34 26 | 62 13 | 99 25  | 140 25 |
| 2  | 0 56  | 15 56 | 35 12 | 63 20 | 100 46 | 141 47 |
| 3  | 1 25  | 16 29 | 35 58 | 64 27 | 102 6  | 143 10 |
| 4  | 1 53  | 17 2  | 36 45 | 65 35 | 103 27 | 144 32 |
| 5  | 2 22  | 17 35 | 37 33 | 66 43 | 104 48 | 145 54 |
| 6  | 2 50  | 18 9  | 38 22 | 67 51 | 106 9  | 147 17 |
| 7  | 3 19  | 18 43 | 39 12 | 69 1  | 107 30 | 148 39 |
| 8  | 3 48  | 19 18 | 40 1  | 70 11 | 108 52 | 150 1  |
| 9  | 4 17  | 19 52 | 40 51 | 71 22 | 110 13 | 151 23 |
| 10 | 4 56  | 20 27 | 41 41 | 72 34 | 111 35 | 152 45 |
| 11 | 5 15  | 21 2  | 42 32 | 73 46 | 112 57 | 154 7  |
| 12 | 5 44  | 21 38 | 43 24 | 74 59 | 114 19 | 155 29 |
| 13 | 6 13  | 22 14 | 44 17 | 76 12 | 115 41 | 156 51 |
| 14 | 6 42  | 22 51 | 45 11 | 77 26 | 117 3  | 158 13 |
| 15 | 7 11  | 23 28 | 46 6  | 78 40 | 118 26 | 159 35 |
| 16 | 7 40  | 24 6  | 47 1  | 79 55 | 119 48 | 160 57 |
| 17 | 8 10  | 24 45 | 47 57 | 81 10 | 121 10 | 162 19 |
| 18 | 8 39  | 25 23 | 48 53 | 82 26 | 122 32 | 163 41 |
| 19 | 9 9   | 26 2  | 49 50 | 83 42 | 123 54 | 165 3  |
| 20 | 9 39  | 26 41 | 50 48 | 84 59 | 125 17 | 166 24 |
| 21 | 10 9  | 27 21 | 51 47 | 86 16 | 126 40 | 167 46 |
| 22 | 10 40 | 28 2  | 52 47 | 87 34 | 128 3  | 169 8  |
| 23 | 11 10 | 28 42 | 53 47 | 88 51 | 129 26 | 170 29 |
| 24 | 11 41 | 29 23 | 54 48 | 90 9  | 130 49 | 171 51 |
| 25 | 12 12 | 30 4  | 55 49 | 91 27 | 132 11 | 173 12 |
| 26 | 12 43 | 30 46 | 56 51 | 92 46 | 133 34 | 174 34 |
| 27 | 13 15 | 31 29 | 57 54 | 94 6  | 134 56 | 175 56 |
| 28 | 13 46 | 32 12 | 58 58 | 95 25 | 136 18 | 177 17 |
| 29 | 14 18 | 32 56 | 60 2  | 96 45 | 137 40 | 178 39 |
| 30 | 14 50 | 33 41 | 61 7  | 98 5  | 139 2  | 180 0  |



Ad latitudinem .48. Gradum

|    | n   |    | m   |    | p   |    | r   |    | s   |    | x   |    |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
| 0  | 180 | 0  | 220 | 58 | 261 | 55 | 298 | 53 | 326 | 19 | 345 | 10 |
| 1  | 181 | 21 | 222 | 20 | 263 | 15 | 299 | 58 | 327 | 4  | 345 | 42 |
| 2  | 182 | 43 | 223 | 42 | 264 | 35 | 301 | 2  | 327 | 48 | 346 | 14 |
| 3  | 184 | 4  | 225 | 4  | 265 | 54 | 302 | 6  | 328 | 31 | 346 | 45 |
| 4  | 185 | 26 | 226 | 26 | 267 | 14 | 303 | 9  | 329 | 14 | 347 | 17 |
| 5  | 186 | 48 | 227 | 49 | 268 | 33 | 304 | 11 | 329 | 56 | 347 | 48 |
| 6  | 188 | 9  | 229 | 11 | 269 | 51 | 305 | 12 | 330 | 37 | 348 | 19 |
| 7  | 189 | 31 | 230 | 34 | 271 | 9  | 306 | 13 | 331 | 18 | 348 | 50 |
| 8  | 190 | 52 | 231 | 57 | 272 | 26 | 307 | 13 | 331 | 58 | 349 | 20 |
| 9  | 192 | 14 | 233 | 20 | 273 | 44 | 308 | 13 | 332 | 39 | 349 | 51 |
| 10 | 193 | 36 | 234 | 43 | 275 | 1  | 309 | 12 | 333 | 19 | 350 | 21 |
| 11 | 194 | 57 | 236 | 6  | 276 | 18 | 310 | 10 | 333 | 58 | 350 | 51 |
| 12 | 196 | 19 | 227 | 28 | 277 | 34 | 311 | 7  | 334 | 37 | 351 | 21 |
| 13 | 197 | 41 | 238 | 50 | 278 | 50 | 312 | 3  | 335 | 15 | 351 | 50 |
| 14 | 199 | 3  | 240 | 12 | 280 | 5  | 312 | 59 | 335 | 54 | 352 | 20 |
| 15 | 200 | 25 | 241 | 34 | 281 | 20 | 313 | 54 | 336 | 32 | 352 | 49 |
| 16 | 201 | 47 | 242 | 57 | 282 | 34 | 314 | 49 | 337 | 9  | 353 | 18 |
| 17 | 203 | 9  | 244 | 19 | 283 | 48 | 315 | 43 | 337 | 46 | 353 | 47 |
| 18 | 204 | 31 | 245 | 41 | 285 | 1  | 316 | 36 | 338 | 22 | 354 | 16 |
| 19 | 205 | 53 | 247 | 3  | 286 | 14 | 317 | 28 | 338 | 58 | 354 | 45 |
| 20 | 207 | 15 | 248 | 25 | 287 | 26 | 318 | 19 | 339 | 33 | 355 | 14 |
| 21 | 208 | 37 | 249 | 47 | 288 | 38 | 319 | 9  | 340 | 8  | 355 | 43 |
| 22 | 209 | 59 | 251 | 8  | 289 | 49 | 319 | 59 | 340 | 42 | 356 | 12 |
| 23 | 211 | 21 | 252 | 30 | 290 | 59 | 320 | 48 | 341 | 17 | 356 | 41 |
| 24 | 212 | 43 | 253 | 51 | 292 | 8  | 321 | 38 | 341 | 51 | 357 | 10 |
| 25 | 214 | 6  | 255 | 12 | 293 | 17 | 322 | 27 | 342 | 25 | 357 | 38 |
| 26 | 215 | 28 | 256 | 33 | 294 | 25 | 323 | 15 | 343 | 58 | 358 | 7  |
| 27 | 216 | 50 | 257 | 54 | 295 | 33 | 324 | 2  | 343 | 31 | 358 | 35 |
| 28 | 218 | 13 | 259 | 14 | 296 | 40 | 324 | 48 | 344 | 4  | 359 | 4  |
| 29 | 219 | 35 | 260 | 35 | 297 | 47 | 325 | 34 | 344 | 37 | 359 | 32 |
| 30 | 220 | 58 | 261 | 55 | 298 | 53 | 326 | 19 | 345 | 10 | 360 | 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ♄     | ♅      | ♆      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 14 22 | 32 45 | 59 59 | 97 9   | 138 34 |
| 1  | 0 27  | 14 53 | 33 30 | 61 5  | 98 30  | 139 58 |
| 2  | 0 55  | 15 25 | 34 15 | 62 11 | 99 51  | 141 21 |
| 3  | 1 22  | 15 57 | 35 1  | 63 13 | 101 13 | 142 44 |
| 4  | 1 50  | 16 29 | 35 47 | 64 26 | 102 34 | 144 7  |
| 5  | 2 18  | 17 1  | 36 34 | 65 35 | 103 56 | 145 30 |
| 6  | 2 45  | 17 34 | 37 22 | 66 44 | 105 18 | 146 54 |
| 7  | 3 13  | 18 8  | 38 10 | 67 54 | 106 40 | 148 17 |
| 8  | 3 40  | 18 41 | 38 59 | 69 5  | 108 3  | 149 40 |
| 9  | 4 8   | 19 15 | 39 49 | 70 16 | 109 25 | 151 3  |
| 10 | 4 36  | 19 47 | 40 39 | 71 28 | 110 48 | 152 26 |
| 11 | 5 4   | 20 24 | 41 30 | 72 40 | 112 11 | 153 49 |
| 12 | 5 32  | 21 0  | 42 22 | 73 53 | 113 34 | 155 12 |
| 13 | 6 0   | 21 35 | 43 14 | 75 6  | 114 57 | 156 35 |
| 14 | 6 28  | 22 10 | 44 7  | 76 20 | 116 20 | 157 58 |
| 15 | 6 57  | 22 46 | 45 1  | 77 35 | 117 44 | 159 21 |
| 16 | 7 25  | 23 23 | 45 56 | 78 51 | 119 7  | 160 44 |
| 17 | 7 54  | 24 1  | 46 52 | 80 7  | 120 30 | 162 7  |
| 18 | 8 22  | 24 38 | 47 48 | 81 24 | 121 53 | 163 29 |
| 19 | 8 51  | 25 16 | 48 45 | 82 40 | 123 16 | 164 52 |
| 20 | 9 20  | 25 54 | 49 42 | 83 57 | 124 39 | 166 4  |
| 21 | 9 49  | 26 33 | 50 40 | 85 14 | 126 2  | 167 37 |
| 22 | 10 19 | 27 13 | 51 39 | 86 32 | 127 26 | 169 0  |
| 23 | 10 48 | 27 52 | 52 39 | 87 50 | 128 49 | 170 23 |
| 24 | 11 18 | 28 32 | 53 40 | 89 9  | 130 13 | 171 46 |
| 25 | 11 48 | 29 12 | 54 41 | 90 28 | 131 37 | 173 8  |
| 26 | 12 18 | 29 53 | 55 43 | 91 48 | 133 1  | 174 31 |
| 27 | 12 49 | 30 35 | 56 46 | 93 8  | 134 24 | 175 53 |
| 28 | 13 20 | 31 18 | 57 50 | 94 28 | 135 48 | 177 16 |
| 29 | 13 51 | 32 1  | 58 54 | 95 48 | 137 11 | 178 38 |
| 30 | 14 22 | 32 45 | 59 59 | 97 9  | 138 34 | 180 0  |



Ad latitudinem .49. Graduum

|    | h      | m      | +      | +      | +      | +      |
|----|--------|--------|--------|--------|--------|--------|
| D  | D m    | D m    | D m    | D m    | D m    | D m    |
| 0  | 180 0  | 221 26 | 262 51 | 300 1  | 327 15 | 345 38 |
| 1  | 181 22 | 222 49 | 264 12 | 301 6  | 327 59 | 346 9  |
| 2  | 182 44 | 224 12 | 265 32 | 302 10 | 328 42 | 346 40 |
| 3  | 184 7  | 225 36 | 266 52 | 303 14 | 329 25 | 347 11 |
| 4  | 185 29 | 226 59 | 268 12 | 304 16 | 330 7  | 347 42 |
| 5  | 186 52 | 228 23 | 269 32 | 305 19 | 330 48 | 348 12 |
| 6  | 188 14 | 229 47 | 270 51 | 306 20 | 331 28 | 348 42 |
| 7  | 189 37 | 231 11 | 272 10 | 307 21 | 332 8  | 349 12 |
| 8  | 191 0  | 232 34 | 273 28 | 308 21 | 332 47 | 349 41 |
| 9  | 192 23 | 233 58 | 274 46 | 309 20 | 333 27 | 350 11 |
| 10 | 193 46 | 235 21 | 276 3  | 310 18 | 334 6  | 350 40 |
| 11 | 195 8  | 236 44 | 277 20 | 311 15 | 334 44 | 351 0  |
| 12 | 196 31 | 238 7  | 278 36 | 312 12 | 335 22 | 351 38 |
| 13 | 197 53 | 239 30 | 279 53 | 313 8  | 335 59 | 352 6  |
| 14 | 199 16 | 240 53 | 281 9  | 314 4  | 336 37 | 352 35 |
| 15 | 200 39 | 242 16 | 282 25 | 314 59 | 337 14 | 353 3  |
| 16 | 202 2  | 243 40 | 283 40 | 315 53 | 337 50 | 353 52 |
| 17 | 203 25 | 245 3  | 284 54 | 316 46 | 338 25 | 354 0  |
| 18 | 204 48 | 246 26 | 286 7  | 317 38 | 339 0  | 354 28 |
| 19 | 206 11 | 247 49 | 287 20 | 318 30 | 339 36 | 354 56 |
| 20 | 207 34 | 249 12 | 288 32 | 319 21 | 340 11 | 355 24 |
| 21 | 208 57 | 250 35 | 289 44 | 320 11 | 340 45 | 355 52 |
| 22 | 210 20 | 251 57 | 290 55 | 321 1  | 341 19 | 356 20 |
| 23 | 211 43 | 253 20 | 292 6  | 321 50 | 341 52 | 356 47 |
| 24 | 213 6  | 254 42 | 293 16 | 322 38 | 342 26 | 357 15 |
| 25 | 214 30 | 256 4  | 294 25 | 323 26 | 342 59 | 357 42 |
| 26 | 215 53 | 257 26 | 295 34 | 324 13 | 343 31 | 358 10 |
| 27 | 217 16 | 258 47 | 296 42 | 324 59 | 344 3  | 358 38 |
| 28 | 218 39 | 260 9  | 297 49 | 325 45 | 344 35 | 359 5  |
| 29 | 220 2  | 261 30 | 298 55 | 326 30 | 345 7  | 359 32 |
| 30 | 221 26 | 262 51 | 300 1  | 327 15 | 345 38 | 360 0  |

R 4



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε     | ζ      | η      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 13 52 | 31 47 | 58 47 | 96 11  | 138 4  |
| 1  | 0 26  | 14 22 | 32 31 | 59 53 | 97 33  | 139 29 |
| 2  | 0 53  | 14 53 | 33 15 | 61 0  | 98 55  | 140 53 |
| 3  | 1 19  | 15 24 | 34 0  | 62 7  | 100 18 | 142 18 |
| 4  | 1 46  | 15 55 | 34 46 | 63 15 | 101 40 | 143 42 |
| 5  | 2 13  | 16 26 | 35 32 | 64 24 | 103 3  | 145 6  |
| 6  | 2 39  | 16 58 | 36 19 | 65 40 | 104 26 | 146 30 |
| 7  | 3 6   | 17 31 | 37 7  | 66 48 | 105 49 | 147 54 |
| 8  | 3 32  | 18 3  | 37 55 | 67 59 | 107 12 | 149 18 |
| 9  | 3 59  | 18 36 | 38 44 | 69 6  | 108 35 | 150 42 |
| 10 | 4 26  | 19 9  | 39 33 | 70 18 | 109 58 | 152 6  |
| 11 | 4 53  | 19 43 | 40 23 | 71 31 | 111 22 | 153 30 |
| 12 | 5 20  | 20 17 | 41 14 | 72 44 | 112 46 | 154 54 |
| 13 | 5 47  | 20 52 | 42 6  | 73 58 | 114 10 | 156 18 |
| 14 | 6 14  | 21 26 | 42 59 | 75 12 | 115 34 | 157 42 |
| 15 | 6 42  | 22 1  | 43 53 | 76 27 | 116 59 | 159 6  |
| 16 | 7 9   | 22 36 | 44 47 | 77 43 | 118 23 | 160 30 |
| 17 | 7 37  | 23 12 | 45 42 | 78 59 | 119 47 | 161 54 |
| 18 | 8 4   | 23 49 | 46 38 | 80 16 | 121 11 | 163 17 |
| 19 | 8 32  | 24 26 | 47 35 | 81 33 | 122 35 | 164 41 |
| 20 | 9 0   | 25 4  | 48 32 | 82 51 | 123 59 | 166 4  |
| 21 | 9 28  | 25 42 | 49 30 | 84 9  | 125 23 | 167 28 |
| 22 | 9 57  | 26 21 | 50 29 | 85 27 | 126 48 | 168 52 |
| 23 | 10 26 | 27 0  | 51 29 | 86 46 | 128 12 | 170 16 |
| 24 | 10 55 | 27 39 | 52 29 | 88 6  | 129 37 | 171 40 |
| 25 | 11 24 | 28 19 | 53 30 | 89 26 | 131 2  | 173 3  |
| 26 | 11 53 | 28 59 | 54 32 | 90 47 | 132 27 | 174 27 |
| 27 | 12 23 | 29 40 | 55 35 | 92 8  | 133 51 | 175 50 |
| 28 | 12 52 | 30 22 | 56 38 | 93 29 | 135 16 | 177 14 |
| 29 | 13 22 | 31 4  | 57 42 | 94 50 | 136 40 | 178 37 |
| 30 | 13 52 | 31 47 | 58 47 | 96 11 | 138 4  | 180 0  |



Ad latitudinem .50. Graduum

|    | n      | m      | ¶      | o      | z      | x       |
|----|--------|--------|--------|--------|--------|---------|
| S  | S m    | S m    | S m    | S m    | S m    | S m     |
| 0  | 180 0  | 221 56 | 263 49 | 301 13 | 328 13 | 346 8   |
| 1  | 181 23 | 223 20 | 265 10 | 302 18 | 328 56 | 346 38  |
| 2  | 182 46 | 224 44 | 266 31 | 303 22 | 329 38 | 347 8   |
| 3  | 184 10 | 226 9  | 267 52 | 304 25 | 330 20 | 347 37  |
| 4  | 185 33 | 227 33 | 269 13 | 305 28 | 331 1  | 348 7   |
| 5  | 186 57 | 228 58 | 270 34 | 306 30 | 332 41 | 348 36  |
| 6  | 188 20 | 230 23 | 271 54 | 307 31 | 332 21 | 349 5   |
| 7  | 189 44 | 231 48 | 273 14 | 308 31 | 333 0  | 349 34  |
| 8  | 191 8  | 233 12 | 274 33 | 309 31 | 333 39 | 350 3   |
| 9  | 192 32 | 234 37 | 275 51 | 310 30 | 334 18 | 350 3 2 |
| 10 | 193 56 | 236 1  | 277 9  | 311 28 | 334 56 | 351 0   |
| 11 | 195 19 | 237 25 | 278 27 | 312 25 | 335 34 | 351 28  |
| 12 | 196 43 | 238 49 | 279 44 | 313 22 | 336 11 | 351 56  |
| 13 | 198 6  | 240 13 | 281 1  | 314 18 | 336 48 | 352 27  |
| 14 | 199 30 | 241 37 | 282 17 | 315 13 | 337 24 | 352 51  |
| 15 | 200 54 | 243 1  | 283 33 | 316 7  | 337 59 | 353 18  |
| 16 | 202 18 | 244 26 | 284 48 | 317 1  | 338 34 | 353 46  |
| 17 | 203 42 | 245 50 | 286 2  | 317 54 | 339 8  | 354 13  |
| 18 | 205 6  | 247 14 | 287 16 | 318 46 | 339 43 | 354 40  |
| 19 | 206 30 | 248 38 | 288 29 | 319 37 | 340 27 | 355 7   |
| 20 | 207 54 | 250 2  | 289 42 | 320 27 | 340 51 | 355 34  |
| 21 | 209 18 | 251 25 | 290 54 | 321 16 | 341 24 | 356 1   |
| 22 | 210 42 | 252 48 | 292 1  | 322 5  | 341 57 | 356 28  |
| 23 | 212 6  | 254 11 | 293 12 | 322 53 | 342 25 | 356 54  |
| 24 | 213 30 | 255 34 | 294 20 | 323 41 | 343 2  | 357 21  |
| 25 | 214 54 | 256 57 | 295 36 | 324 28 | 343 34 | 357 47  |
| 26 | 216 18 | 258 20 | 296 45 | 325 14 | 344 5  | 358 14  |
| 27 | 217 42 | 259 42 | 297 53 | 326 0  | 344 36 | 358 41  |
| 28 | 219 7  | 261 5  | 299 0  | 326 45 | 345 7  | 359 7   |
| 29 | 220 31 | 262 27 | 300 7  | 327 29 | 345 32 | 359 34  |
| 30 | 221 56 | 263 49 | 301 13 | 328 13 | 346 8  | 360 0   |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ     | η      | θ      |
|----|-------|-------|-------|-------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m   | δ m    | δ m    |
| 0  | 0 0   | 13 21 | 30 46 | 57 31 | 95 10  | 137 33 |
| 1  | 0 25  | 13 50 | 31 29 | 58 37 | 96 33  | 138 59 |
| 2  | 0 50  | 14 20 | 32 13 | 59 44 | 97 56  | 140 24 |
| 3  | 1 16  | 14 50 | 32 57 | 60 51 | 99 19  | 141 50 |
| 4  | 1 41  | 15 20 | 33 42 | 61 59 | 100 42 | 143 15 |
| 5  | 2 7   | 15 50 | 34 27 | 63 8  | 102 6  | 144 40 |
| 6  | 2 32  | 16 21 | 35 13 | 64 18 | 103 30 | 146 6  |
| 7  | 2 58  | 16 53 | 36 0  | 65 29 | 104 54 | 147 31 |
| 8  | 3 24  | 17 24 | 36 48 | 66 40 | 106 18 | 148 56 |
| 9  | 3 50  | 17 56 | 37 36 | 67 52 | 107 42 | 150 21 |
| 10 | 4 16  | 18 28 | 38 25 | 69 4  | 109 7  | 151 46 |
| 11 | 4 42  | 19 1  | 39 15 | 70 17 | 110 32 | 153 11 |
| 12 | 5 8   | 19 34 | 40 5  | 71 30 | 111 57 | 154 36 |
| 13 | 5 34  | 20 7  | 40 56 | 72 44 | 113 22 | 156 1  |
| 14 | 6 0   | 20 40 | 41 48 | 73 59 | 114 47 | 157 26 |
| 15 | 6 26  | 21 14 | 42 41 | 75 15 | 116 12 | 158 50 |
| 16 | 6 52  | 21 49 | 43 35 | 76 32 | 117 37 | 160 15 |
| 17 | 7 19  | 22 25 | 44 30 | 77 50 | 119 2  | 161 40 |
| 18 | 7 46  | 23 1  | 45 25 | 79 8  | 120 27 | 163 5  |
| 19 | 8 13  | 23 37 | 46 21 | 80 25 | 121 52 | 164 30 |
| 20 | 8 40  | 24 13 | 47 18 | 81 43 | 123 18 | 165 54 |
| 21 | 9 7   | 24 50 | 48 16 | 83 2  | 124 43 | 167 19 |
| 22 | 9 35  | 25 28 | 49 14 | 84 21 | 126 9  | 168 44 |
| 23 | 10 2  | 26 6  | 50 13 | 85 41 | 127 35 | 170 8  |
| 24 | 10 30 | 26 44 | 51 13 | 87 1  | 129 1  | 171 33 |
| 25 | 10 58 | 27 22 | 52 14 | 88 21 | 130 26 | 172 57 |
| 26 | 11 26 | 28 1  | 53 16 | 89 42 | 131 52 | 174 22 |
| 27 | 11 55 | 28 41 | 54 19 | 91 4  | 133 17 | 175 47 |
| 28 | 12 23 | 29 22 | 55 22 | 92 26 | 134 43 | 177 11 |
| 29 | 12 52 | 30 4  | 56 26 | 93 48 | 136 8  | 178 36 |
| 30 | 13 21 | 30 46 | 57 31 | 95 10 | 137 33 | 180 0  |



Ad latitudinem .51. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♊  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 222 27 | 264 50 | 302 29 | 329 14 | 346 39 |
| 1  | 181 24 | 223 52 | 266 12 | 303 34 | 329 56 | 347 8  |
| 2  | 182 49 | 225 17 | 267 34 | 304 38 | 330 38 | 347 37 |
| 3  | 184 13 | 226 43 | 268 56 | 305 41 | 331 19 | 348 5  |
| 4  | 185 38 | 228 8  | 270 18 | 306 44 | 331 59 | 348 34 |
| 5  | 187 3  | 229 34 | 271 39 | 307 46 | 332 38 | 349 2  |
| 6  | 188 27 | 230 59 | 272 59 | 308 47 | 333 16 | 349 30 |
| 7  | 189 52 | 232 25 | 274 19 | 309 47 | 333 54 | 349 58 |
| 8  | 191 16 | 233 51 | 275 39 | 310 46 | 334 32 | 350 25 |
| 9  | 192 41 | 235 17 | 276 58 | 311 44 | 335 10 | 350 53 |
| 10 | 194 6  | 236 42 | 278 17 | 312 42 | 335 47 | 351 20 |
| 11 | 195 30 | 238 8  | 279 35 | 313 39 | 336 23 | 351 47 |
| 12 | 196 55 | 239 33 | 280 52 | 314 35 | 336 59 | 352 14 |
| 13 | 198 20 | 240 58 | 282 10 | 315 30 | 337 35 | 352 41 |
| 14 | 199 45 | 242 23 | 283 28 | 316 25 | 338 11 | 353 8  |
| 15 | 201 10 | 243 48 | 284 45 | 317 19 | 338 46 | 353 34 |
| 16 | 202 34 | 245 13 | 286 1  | 318 12 | 339 20 | 354 0  |
| 17 | 203 59 | 246 38 | 287 16 | 319 4  | 339 53 | 354 26 |
| 18 | 205 34 | 248 3  | 288 30 | 319 55 | 340 26 | 354 52 |
| 19 | 206 49 | 249 28 | 289 43 | 320 45 | 340 59 | 355 18 |
| 20 | 208 14 | 250 53 | 290 56 | 321 35 | 341 32 | 355 44 |
| 21 | 209 39 | 252 18 | 292 8  | 322 24 | 342 4  | 356 10 |
| 22 | 211 4  | 253 42 | 293 20 | 323 12 | 342 36 | 356 36 |
| 23 | 212 29 | 255 6  | 294 31 | 324 0  | 343 7  | 357 2  |
| 24 | 213 54 | 256 30 | 295 42 | 324 47 | 343 39 | 357 28 |
| 25 | 215 20 | 257 54 | 296 52 | 325 33 | 344 10 | 357 53 |
| 26 | 216 44 | 259 18 | 298 1  | 326 18 | 344 40 | 358 19 |
| 27 | 218 10 | 260 41 | 299 9  | 327 3  | 345 10 | 358 44 |
| 28 | 219 36 | 262 4  | 300 16 | 327 47 | 345 40 | 359 10 |
| 29 | 221 1  | 263 27 | 301 23 | 328 31 | 346 10 | 359 35 |
| 30 | 222 27 | 264 50 | 302 29 | 329 14 | 346 39 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | ε     | ζ     | η      | ι      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 12 48 | 29 42 | 56 11 | 94 6   | 137 0  |
| 1  | 0 24  | 13 16 | 30 24 | 57 17 | 95 30  | 138 37 |
| 2  | 0 48  | 13 45 | 31 7  | 58 24 | 96 54  | 139 54 |
| 3  | 1 13  | 14 14 | 31 50 | 59 31 | 98 18  | 141 20 |
| 4  | 1 37  | 14 43 | 32 34 | 60 39 | 99 42  | 142 47 |
| 5  | 2 2   | 15 12 | 33 18 | 61 48 | 101 7  | 144 13 |
| 6  | 2 26  | 15 42 | 34 3  | 62 58 | 102 32 | 145 40 |
| 7  | 2 51  | 16 13 | 34 49 | 64 9  | 103 57 | 147 6  |
| 8  | 3 15  | 16 43 | 35 36 | 65 20 | 105 22 | 148 52 |
| 9  | 3 40  | 17 14 | 36 24 | 66 32 | 106 47 | 149 58 |
| 10 | 4 5   | 17 45 | 37 12 | 67 45 | 108 12 | 151 24 |
| 11 | 4 30  | 18 16 | 38 1  | 68 59 | 109 38 | 152 50 |
| 12 | 4 55  | 18 48 | 38 51 | 70 13 | 111 4  | 154 16 |
| 13 | 5 20  | 19 20 | 39 42 | 71 28 | 112 30 | 155 42 |
| 14 | 5 45  | 19 52 | 40 34 | 72 44 | 113 56 | 157 8  |
| 15 | 6 10  | 20 25 | 41 26 | 74 0  | 115 23 | 158 39 |
| 16 | 6 35  | 20 59 | 42 19 | 75 17 | 116 49 | 160 0  |
| 17 | 7 1   | 21 34 | 43 13 | 76 34 | 118 15 | 161 26 |
| 18 | 7 26  | 22 8  | 44 8  | 77 52 | 119 42 | 162 52 |
| 19 | 7 52  | 22 43 | 45 3  | 79 11 | 121 8  | 164 18 |
| 20 | 8 18  | 23 18 | 45 59 | 80 30 | 122 35 | 165 43 |
| 21 | 8 44  | 23 54 | 46 56 | 81 50 | 124 2  | 167 9  |
| 22 | 9 11  | 24 31 | 47 54 | 83 10 | 125 28 | 168 35 |
| 23 | 9 37  | 25 8  | 48 53 | 84 31 | 126 55 | 170 1  |
| 24 | 10 4  | 25 45 | 49 53 | 85 51 | 128 22 | 171 27 |
| 25 | 10 31 | 26 23 | 50 54 | 87 12 | 129 48 | 172 52 |
| 26 | 10 58 | 27 2  | 51 56 | 88 34 | 131 15 | 174 18 |
| 27 | 11 25 | 27 41 | 52 59 | 89 57 | 132 41 | 175 44 |
| 28 | 11 53 | 28 21 | 54 2  | 91 20 | 134 8  | 177 9  |
| 29 | 12 20 | 29 1  | 55 6  | 92 43 | 135 34 | 178 35 |
| 30 | 12 48 | 29 42 | 56 11 | 94 6  | 137 0  | 180 0  |



Ad latitudinem .52. Graduum

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| h  | m      | m      | m      | m      | m      | m      |
| 0  | 180 0  | 223 0  | 265 54 | 303 49 | 330 18 | 347 12 |
| 1  | 181 25 | 224 26 | 267 17 | 304 54 | 330 59 | 347 40 |
| 2  | 182 51 | 225 52 | 268 40 | 305 58 | 331 39 | 348 7  |
| 3  | 184 16 | 227 19 | 270 3  | 307 1  | 332 19 | 348 35 |
| 4  | 185 42 | 228 45 | 271 26 | 308 4  | 332 58 | 349 2  |
| 5  | 187 8  | 230 12 | 272 48 | 309 6  | 333 37 | 349 29 |
| 6  | 188 33 | 231 38 | 274 9  | 310 7  | 334 15 | 349 56 |
| 7  | 189 59 | 233 5  | 275 29 | 311 7  | 334 52 | 350 23 |
| 8  | 191 25 | 234 32 | 276 50 | 312 6  | 335 29 | 350 49 |
| 9  | 192 51 | 235 58 | 278 10 | 313 4  | 336 6  | 351 16 |
| 10 | 194 17 | 237 25 | 279 30 | 314 1  | 336 42 | 351 42 |
| 11 | 195 42 | 238 52 | 280 49 | 314 57 | 337 17 | 352 8  |
| 12 | 197 8  | 240 18 | 282 8  | 315 52 | 337 52 | 352 34 |
| 13 | 198 34 | 241 45 | 283 26 | 316 47 | 338 26 | 352 59 |
| 14 | 200 0  | 243 11 | 284 43 | 317 41 | 339 1  | 353 25 |
| 15 | 201 26 | 244 37 | 286 9  | 318 34 | 339 35 | 353 50 |
| 16 | 202 52 | 246 4  | 287 16 | 319 26 | 340 8  | 354 15 |
| 17 | 204 18 | 247 30 | 288 32 | 320 18 | 340 40 | 354 40 |
| 18 | 205 44 | 248 56 | 289 47 | 321 9  | 341 12 | 355 5  |
| 19 | 207 10 | 250 22 | 291 1  | 321 59 | 341 44 | 355 30 |
| 20 | 208 36 | 251 48 | 292 15 | 322 48 | 342 15 | 355 55 |
| 21 | 210 2  | 253 13 | 293 28 | 323 36 | 342 46 | 356 20 |
| 22 | 211 28 | 254 38 | 294 40 | 324 24 | 343 17 | 356 45 |
| 23 | 212 54 | 256 3  | 295 51 | 325 11 | 343 47 | 357 9  |
| 24 | 214 20 | 257 28 | 297 2  | 325 57 | 344 18 | 357 34 |
| 25 | 215 47 | 258 53 | 298 12 | 326 42 | 344 48 | 357 58 |
| 26 | 217 13 | 260 18 | 299 21 | 327 26 | 345 17 | 358 23 |
| 27 | 218 40 | 261 42 | 300 29 | 328 10 | 345 46 | 358 47 |
| 28 | 220 6  | 263 6  | 301 36 | 328 53 | 346 15 | 359 12 |
| 29 | 221 33 | 264 30 | 302 43 | 329 36 | 346 44 | 359 36 |
| 30 | 223 0  | 265 54 | 303 49 | 330 18 | 347 12 | 360 0  |



Tabula Ascensionum Obliquarum.

|    | γ     | δ     | π     | ε     | ζ      | η      |
|----|-------|-------|-------|-------|--------|--------|
| δ  | δ m   | δ m   | δ m   | δ m   | δ m    | δ m    |
| 0  | 0 0   | 12 14 | 28 34 | 54 46 | 92 58  | 136 26 |
| 1  | 0 23  | 12 41 | 29 15 | 55 52 | 94 23  | 137 54 |
| 2  | 0 46  | 13 8  | 29 57 | 56 59 | 95 48  | 139 22 |
| 3  | 1 9   | 13 36 | 30 39 | 58 6  | 97 13  | 140 49 |
| 4  | 1 32  | 14 4  | 31 22 | 59 14 | 98 38  | 142 7  |
| 5  | 1 56  | 14 32 | 32 6  | 60 23 | 100 4  | 143 44 |
| 6  | 2 19  | 15 1  | 32 51 | 61 33 | 101 30 | 145 12 |
| 7  | 2 43  | 15 30 | 33 36 | 62 44 | 102 56 | 146 39 |
| 8  | 3 6   | 15 59 | 34 22 | 63 56 | 104 22 | 148 7  |
| 9  | 3 30  | 16 29 | 35 8  | 65 9  | 105 48 | 149 34 |
| 10 | 3 54  | 16 59 | 35 55 | 66 22 | 107 15 | 151 1  |
| 11 | 4 17  | 17 29 | 36 43 | 67 36 | 108 42 | 152 29 |
| 12 | 4 41  | 18 0  | 37 32 | 68 51 | 110 9  | 153 56 |
| 13 | 5 5   | 18 31 | 38 22 | 70 6  | 111 36 | 155 23 |
| 14 | 5 29  | 19 32 | 39 13 | 71 22 | 113 4  | 156 50 |
| 15 | 5 53  | 19 34 | 40 5  | 72 39 | 114 32 | 158 17 |
| 16 | 6 17  | 20 7  | 40 57 | 73 57 | 115 59 | 159 44 |
| 17 | 6 41  | 20 40 | 41 50 | 75 15 | 117 26 | 161 11 |
| 18 | 7 5   | 21 13 | 42 44 | 76 34 | 118 54 | 162 38 |
| 19 | 7 30  | 21 47 | 43 39 | 77 53 | 120 21 | 164 5  |
| 20 | 7 55  | 22 21 | 44 36 | 79 13 | 121 49 | 165 32 |
| 21 | 8 20  | 22 56 | 45 33 | 80 34 | 123 17 | 166 59 |
| 22 | 8 45  | 23 31 | 46 31 | 81 55 | 124 45 | 168 26 |
| 23 | 9 10  | 24 7  | 47 30 | 83 16 | 126 13 | 169 53 |
| 24 | 9 36  | 24 43 | 48 29 | 84 38 | 127 41 | 171 20 |
| 25 | 10 2  | 25 20 | 49 29 | 86 0  | 129 8  | 172 46 |
| 26 | 10 28 | 25 58 | 50 30 | 87 22 | 130 36 | 174 13 |
| 27 | 10 54 | 26 36 | 51 32 | 88 45 | 132 4  | 175 40 |
| 28 | 11 20 | 27 15 | 52 35 | 90 9  | 133 31 | 177 7  |
| 29 | 11 47 | 27 54 | 53 40 | 91 33 | 134 59 | 178 34 |
| 30 | 12 14 | 28 34 | 54 46 | 92 58 | 136 26 | 180 0  |



Ad latitudinem .53. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♈ m    | ♉ m    | ♊ m    | ♋ m    | ♌ m    | ♍ m    |
| 0  | 180 0  | 223 34 | 267 2  | 305 14 | 331 26 | 347 46 |
| 1  | 181 26 | 225 1  | 268 27 | 306 20 | 332 6  | 348 13 |
| 2  | 182 53 | 226 29 | 269 51 | 307 25 | 332 45 | 348 40 |
| 3  | 184 20 | 227 56 | 271 15 | 308 28 | 333 24 | 349 6  |
| 4  | 185 47 | 229 24 | 272 38 | 309 30 | 334 2  | 349 32 |
| 5  | 187 14 | 230 52 | 274 0  | 310 31 | 334 40 | 349 58 |
| 6  | 188 40 | 232 19 | 275 22 | 311 31 | 335 17 | 350 24 |
| 7  | 190 7  | 233 47 | 276 44 | 312 30 | 335 53 | 350 50 |
| 8  | 191 34 | 235 15 | 278 5  | 313 21 | 336 29 | 351 15 |
| 9  | 193 1  | 236 43 | 279 26 | 314 27 | 337 4  | 351 40 |
| 10 | 194 28 | 238 11 | 280 47 | 315 24 | 337 39 | 352 5  |
| 11 | 196 55 | 239 39 | 282 7  | 316 21 | 338 13 | 352 30 |
| 12 | 197 22 | 241 6  | 283 26 | 317 16 | 338 47 | 352 55 |
| 13 | 198 49 | 242 24 | 284 45 | 318 10 | 339 20 | 353 19 |
| 14 | 200 16 | 244 1  | 286 3  | 319 3  | 339 53 | 353 42 |
| 15 | 201 43 | 245 28 | 287 21 | 319 55 | 340 26 | 354 7  |
| 16 | 203 10 | 246 56 | 288 38 | 320 47 | 340 58 | 354 31 |
| 17 | 204 37 | 248 24 | 289 54 | 321 38 | 341 29 | 354 55 |
| 18 | 206 4  | 249 51 | 291 9  | 322 28 | 342 0  | 355 19 |
| 19 | 207 31 | 251 18 | 292 24 | 323 17 | 342 31 | 355 43 |
| 20 | 208 59 | 252 45 | 293 38 | 324 5  | 343 1  | 356 6  |
| 21 | 210 26 | 254 12 | 294 51 | 324 52 | 343 31 | 356 30 |
| 22 | 211 53 | 255 38 | 296 4  | 325 38 | 344 1  | 356 54 |
| 23 | 213 21 | 257 4  | 297 16 | 326 24 | 344 30 | 357 17 |
| 24 | 214 48 | 258 30 | 298 27 | 327 9  | 344 59 | 357 41 |
| 25 | 216 16 | 259 56 | 299 37 | 327 54 | 345 28 | 358 4  |
| 26 | 217 43 | 261 22 | 300 46 | 328 38 | 345 56 | 358 28 |
| 27 | 219 11 | 262 47 | 301 54 | 329 21 | 346 24 | 358 51 |
| 28 | 220 38 | 264 12 | 303 1  | 330 3  | 346 52 | 359 14 |
| 29 | 222 6  | 265 37 | 304 8  | 330 45 | 347 19 | 359 37 |
| 30 | 223 34 | 267 2  | 305 14 | 331 26 | 347 46 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | ♈     | ♉     | ♊     | ♋     | ♌      | ♍      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 11 38 | 27 22 | 53 14 | 91 46  | 135 50 |
| 1  | 0 22  | 12 4  | 28 2  | 54 21 | 93 12  | 137 19 |
| 2  | 0 44  | 12 30 | 28 43 | 55 28 | 94 38  | 138 48 |
| 3  | 1 6   | 12 56 | 29 24 | 56 36 | 96 4   | 140 17 |
| 4  | 1 28  | 13 23 | 30 6  | 57 44 | 97 31  | 141 46 |
| 5  | 1 50  | 13 50 | 30 49 | 58 53 | 98 58  | 143 14 |
| 6  | 2 12  | 14 18 | 31 32 | 60 3  | 100 25 | 144 43 |
| 7  | 2 34  | 14 46 | 32 16 | 61 14 | 101 52 | 146 12 |
| 8  | 2 57  | 15 14 | 33 1  | 62 26 | 103 19 | 147 41 |
| 9  | 3 19  | 15 42 | 33 47 | 63 39 | 104 47 | 149 10 |
| 10 | 3 42  | 16 11 | 34 33 | 64 53 | 106 15 | 150 38 |
| 11 | 4 4   | 16 40 | 35 20 | 66 8  | 107 43 | 152 7  |
| 12 | 4 27  | 17 9  | 36 8  | 67 23 | 109 11 | 153 35 |
| 13 | 4 49  | 17 38 | 36 57 | 68 39 | 110 40 | 155 3  |
| 14 | 5 12  | 18 8  | 37 48 | 69 56 | 112 8  | 156 31 |
| 15 | 5 35  | 18 39 | 38 39 | 71 13 | 113 37 | 157 59 |
| 16 | 5 58  | 19 11 | 39 31 | 72 31 | 115 5  | 159 28 |
| 17 | 6 21  | 19 43 | 40 24 | 73 50 | 116 34 | 160 56 |
| 18 | 6 44  | 20 15 | 41 18 | 75 10 | 118 3  | 162 24 |
| 19 | 7 8   | 20 48 | 42 12 | 76 30 | 119 32 | 163 52 |
| 20 | 7 32  | 21 21 | 43 7  | 77 51 | 121 1  | 165 20 |
| 21 | 7 56  | 21 54 | 44 3  | 79 13 | 122 30 | 166 48 |
| 22 | 8 20  | 22 28 | 45 0  | 80 35 | 123 59 | 168 16 |
| 23 | 8 44  | 23 3  | 45 58 | 81 57 | 125 28 | 169 44 |
| 24 | 9 8   | 23 38 | 46 58 | 83 20 | 126 57 | 171 12 |
| 25 | 9 32  | 24 14 | 47 59 | 84 43 | 128 26 | 172 40 |
| 26 | 9 57  | 24 50 | 49 0  | 86 6  | 129 55 | 174 8  |
| 27 | 10 22 | 25 27 | 50 2  | 87 30 | 131 24 | 175 36 |
| 28 | 10 47 | 26 5  | 51 5  | 88 55 | 132 53 | 177 4  |
| 29 | 11 12 | 26 43 | 52 9  | 90 20 | 134 22 | 178 32 |
| 30 | 11 38 | 27 22 | 53 14 | 91 46 | 135 50 | 180 0  |



Ad latitudinem .54. Graduum

|    | ♌      | ♍      | ♎      | ♏      | ♐      | ♑      |
|----|--------|--------|--------|--------|--------|--------|
| ♈  | ♉      | ♊      | ♋      | ♌      | ♍      | ♎      |
| 0  | 180 0  | 224 10 | 268 14 | 306 46 | 332 38 | 348 22 |
| 1  | 181 28 | 225 38 | 269 40 | 307 51 | 333 17 | 348 48 |
| 2  | 182 56 | 227 7  | 271 5  | 308 55 | 333 55 | 349 13 |
| 3  | 184 24 | 228 36 | 272 30 | 309 58 | 334 33 | 349 38 |
| 4  | 185 52 | 230 5  | 273 54 | 311 0  | 335 10 | 350 3  |
| 5  | 187 20 | 231 34 | 275 17 | 312 1  | 335 46 | 350 28 |
| 6  | 188 48 | 233 3  | 276 40 | 313 2  | 336 22 | 350 52 |
| 7  | 190 16 | 234 32 | 278 3  | 314 2  | 336 57 | 351 16 |
| 8  | 191 44 | 236 1  | 279 25 | 315 0  | 337 32 | 351 40 |
| 9  | 193 12 | 237 30 | 280 47 | 315 57 | 338 6  | 352 4  |
| 10 | 194 40 | 238 59 | 282 9  | 316 53 | 338 39 | 352 28 |
| 11 | 196 8  | 240 28 | 283 30 | 317 48 | 339 12 | 352 52 |
| 12 | 197 36 | 241 57 | 284 50 | 318 42 | 339 45 | 353 16 |
| 13 | 199 4  | 243 26 | 286 10 | 319 36 | 340 17 | 353 39 |
| 14 | 200 32 | 244 55 | 287 29 | 320 29 | 340 49 | 354 2  |
| 15 | 202 1  | 246 23 | 288 47 | 321 21 | 341 21 | 354 25 |
| 16 | 203 29 | 247 52 | 290 4  | 322 12 | 341 52 | 354 48 |
| 17 | 204 57 | 249 20 | 291 21 | 323 3  | 342 22 | 355 11 |
| 18 | 206 25 | 250 49 | 292 37 | 323 52 | 342 51 | 355 33 |
| 19 | 207 53 | 252 17 | 293 52 | 324 40 | 343 20 | 355 56 |
| 20 | 209 22 | 253 45 | 295 7  | 325 27 | 343 49 | 356 18 |
| 21 | 210 50 | 255 13 | 296 21 | 326 13 | 344 18 | 356 41 |
| 22 | 212 19 | 256 41 | 297 34 | 326 59 | 344 46 | 357 3  |
| 23 | 213 48 | 258 8  | 298 46 | 327 44 | 345 14 | 357 26 |
| 24 | 215 17 | 259 35 | 299 57 | 328 28 | 345 42 | 357 48 |
| 25 | 216 46 | 261 2  | 301 7  | 329 11 | 346 10 | 358 10 |
| 26 | 218 14 | 262 29 | 302 16 | 329 54 | 346 37 | 358 32 |
| 27 | 219 43 | 263 56 | 303 24 | 330 36 | 347 4  | 358 54 |
| 28 | 221 12 | 265 22 | 304 32 | 331 17 | 347 30 | 359 16 |
| 29 | 222 41 | 266 48 | 305 39 | 331 58 | 347 56 | 359 38 |
| 30 | 224 10 | 268 14 | 306 46 | 332 38 | 348 22 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε     | Ω      | np     |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 11 1  | 26 6  | 51 37 | 90 30  | 135 13 |
| 1  | 0 20  | 11 25 | 26 44 | 52 42 | 91 57  | 136 43 |
| 2  | 0 41  | 11 50 | 27 23 | 53 49 | 93 24  | 138 13 |
| 3  | 1 2   | 12 15 | 28 3  | 54 57 | 94 52  | 139 43 |
| 4  | 1 23  | 12 40 | 28 44 | 56 6  | 96 20  | 141 13 |
| 5  | 1 44  | 13 6  | 29 26 | 57 16 | 97 48  | 142 43 |
| 6  | 2 5   | 13 32 | 30 8  | 58 27 | 99 16  | 144 13 |
| 7  | 2 26  | 13 59 | 30 51 | 59 39 | 100 44 | 145 43 |
| 8  | 2 47  | 14 26 | 31 35 | 60 52 | 102 13 | 147 13 |
| 9  | 3 8   | 14 53 | 32 20 | 62 5  | 103 42 | 148 43 |
| 10 | 3 30  | 15 20 | 33 6  | 63 19 | 105 11 | 150 13 |
| 11 | 3 51  | 15 48 | 33 53 | 64 34 | 106 40 | 151 42 |
| 12 | 4 12  | 16 16 | 34 41 | 65 50 | 108 10 | 153 12 |
| 13 | 4 34  | 16 44 | 35 29 | 67 7  | 109 40 | 154 41 |
| 14 | 4 55  | 17 13 | 36 18 | 68 24 | 111 10 | 156 11 |
| 15 | 5 17  | 17 42 | 37 8  | 69 42 | 112 40 | 157 40 |
| 16 | 5 39  | 18 12 | 37 59 | 71 1  | 114 10 | 159 10 |
| 17 | 6 1   | 18 43 | 38 51 | 72 21 | 115 40 | 160 39 |
| 18 | 6 23  | 19 14 | 39 44 | 73 31 | 117 10 | 162 8  |
| 19 | 6 45  | 19 45 | 40 38 | 75 2  | 118 40 | 163 38 |
| 20 | 7 7   | 20 17 | 41 33 | 76 24 | 120 10 | 165 8  |
| 21 | 7 29  | 20 49 | 42 29 | 77 46 | 121 40 | 166 38 |
| 22 | 7 52  | 21 22 | 43 26 | 79 8  | 123 11 | 168 7  |
| 23 | 8 15  | 21 55 | 44 24 | 80 31 | 124 42 | 169 36 |
| 24 | 8 38  | 22 26 | 45 23 | 81 55 | 126 12 | 171 5  |
| 25 | 9 1   | 23 4  | 46 22 | 83 20 | 127 42 | 172 36 |
| 26 | 9 35  | 23 39 | 47 23 | 84 45 | 129 13 | 174 4  |
| 27 | 9 49  | 24 15 | 48 25 | 86 11 | 130 43 | 175 33 |
| 28 | 10 13 | 24 51 | 49 28 | 87 37 | 132 13 | 177 2  |
| 29 | 10 37 | 25 28 | 50 32 | 89 3  | 133 43 | 178 31 |
| 30 | 11 1  | 26 6  | 51 37 | 90 30 | 135 13 | 180 0  |



Ad latitudinem .55. Graduum

|    | ♈   |    | ♉   |    | ♊   |    | ♋   |    | ♌   |    | ♍   |    |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
|    | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  | h   | m  |
| 0  | 180 | 0  | 224 | 47 | 269 | 30 | 308 | 23 | 333 | 54 | 348 | 59 |
| 1  | 181 | 29 | 226 | 17 | 270 | 57 | 309 | 28 | 334 | 32 | 349 | 23 |
| 2  | 182 | 58 | 227 | 47 | 272 | 23 | 310 | 32 | 335 | 9  | 349 | 47 |
| 3  | 184 | 27 | 229 | 17 | 273 | 49 | 311 | 35 | 335 | 45 | 350 | 11 |
| 4  | 185 | 56 | 230 | 47 | 275 | 15 | 312 | 37 | 336 | 21 | 350 | 35 |
| 5  | 187 | 26 | 232 | 18 | 276 | 40 | 313 | 38 | 336 | 56 | 350 | 59 |
| 6  | 188 | 55 | 233 | 48 | 278 | 5  | 314 | 37 | 337 | 31 | 351 | 22 |
| 7  | 190 | 24 | 235 | 18 | 279 | 29 | 315 | 36 | 338 | 5  | 351 | 45 |
| 8  | 191 | 53 | 236 | 49 | 280 | 52 | 316 | 34 | 338 | 38 | 352 | 8  |
| 9  | 193 | 22 | 238 | 20 | 282 | 14 | 317 | 31 | 339 | 11 | 352 | 31 |
| 10 | 194 | 52 | 239 | 50 | 283 | 30 | 318 | 27 | 339 | 43 | 352 | 53 |
| 11 | 196 | 21 | 241 | 20 | 284 | 58 | 319 | 22 | 340 | 15 | 353 | 15 |
| 12 | 197 | 50 | 242 | 50 | 286 | 19 | 320 | 16 | 340 | 46 | 353 | 37 |
| 13 | 199 | 20 | 244 | 20 | 287 | 39 | 321 | 9  | 341 | 17 | 353 | 59 |
| 14 | 200 | 49 | 245 | 50 | 288 | 59 | 322 | 1  | 341 | 48 | 354 | 21 |
| 15 | 202 | 19 | 247 | 20 | 290 | 18 | 322 | 52 | 342 | 18 | 354 | 43 |
| 16 | 203 | 48 | 248 | 50 | 291 | 36 | 323 | 42 | 342 | 47 | 355 | 5  |
| 17 | 205 | 18 | 250 | 20 | 292 | 53 | 324 | 31 | 343 | 16 | 355 | 26 |
| 18 | 206 | 47 | 251 | 50 | 294 | 10 | 325 | 19 | 343 | 44 | 355 | 48 |
| 19 | 208 | 17 | 253 | 20 | 295 | 26 | 326 | 7  | 344 | 12 | 356 | 9  |
| 20 | 209 | 47 | 254 | 49 | 296 | 41 | 326 | 54 | 344 | 40 | 356 | 30 |
| 21 | 211 | 17 | 256 | 18 | 297 | 55 | 327 | 40 | 345 | 7  | 356 | 52 |
| 22 | 212 | 47 | 257 | 47 | 299 | 8  | 328 | 25 | 345 | 34 | 357 | 13 |
| 23 | 214 | 17 | 259 | 16 | 300 | 31 | 329 | 9  | 346 | 1  | 357 | 34 |
| 24 | 215 | 47 | 260 | 44 | 301 | 33 | 329 | 52 | 346 | 28 | 357 | 55 |
| 25 | 217 | 17 | 262 | 12 | 302 | 44 | 330 | 34 | 346 | 54 | 358 | 16 |
| 26 | 218 | 47 | 263 | 40 | 303 | 54 | 331 | 16 | 347 | 20 | 358 | 37 |
| 27 | 220 | 17 | 265 | 8  | 305 | 3  | 331 | 57 | 347 | 45 | 358 | 58 |
| 28 | 221 | 47 | 266 | 36 | 306 | 11 | 332 | 37 | 348 | 10 | 359 | 19 |
| 29 | 223 | 17 | 268 | 3  | 307 | 18 | 333 | 16 | 348 | 35 | 359 | 40 |
| 30 | 224 | 47 | 269 | 30 | 308 | 23 | 333 | 54 | 348 | 59 | 360 | 0  |



# Tabula Ascensionum Obliquarum

|    | γ     | δ     | π     | ε     | Ω      | η      |
|----|-------|-------|-------|-------|--------|--------|
| h  | h m   | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0   | 10 21 | 24 44 | 49 52 | 89 8   | 134 33 |
| 1  | 0 19  | 10 44 | 25 21 | 50 58 | 90 37  | 136 5  |
| 2  | 0 39  | 11 7  | 25 59 | 52 5  | 92 6   | 137 36 |
| 3  | 0 58  | 11 31 | 26 38 | 53 13 | 93 35  | 139 8  |
| 4  | 1 18  | 11 55 | 27 18 | 54 22 | 95 4   | 140 39 |
| 5  | 1 38  | 12 19 | 27 59 | 55 32 | 96 33  | 142 10 |
| 6  | 1 57  | 12 44 | 28 40 | 56 43 | 98 3   | 143 42 |
| 7  | 2 17  | 13 9  | 29 22 | 57 55 | 99 33  | 145 13 |
| 8  | 2 37  | 13 34 | 30 5  | 59 8  | 101 3  | 146 45 |
| 9  | 2 57  | 14 0  | 30 48 | 60 22 | 102 33 | 148 16 |
| 10 | 3 17  | 14 26 | 31 37 | 61 37 | 104 3  | 149 47 |
| 11 | 3 37  | 14 52 | 32 17 | 62 53 | 105 34 | 151 18 |
| 12 | 3 57  | 15 19 | 33 3  | 64 9  | 107 5  | 152 49 |
| 13 | 4 17  | 15 46 | 33 50 | 65 26 | 108 36 | 154 20 |
| 14 | 4 37  | 16 13 | 34 39 | 66 44 | 110 7  | 155 51 |
| 15 | 4 57  | 16 41 | 35 29 | 68 3  | 111 39 | 157 21 |
| 16 | 5 17  | 17 10 | 36 20 | 69 23 | 113 10 | 158 52 |
| 17 | 5 38  | 17 39 | 37 12 | 70 44 | 114 41 | 160 23 |
| 18 | 5 59  | 18 9  | 38 4  | 72 5  | 116 12 | 161 54 |
| 19 | 6 20  | 18 39 | 38 57 | 73 27 | 117 44 | 163 25 |
| 20 | 6 41  | 19 9  | 39 51 | 74 50 | 119 16 | 164 55 |
| 21 | 7 2   | 19 40 | 40 46 | 76 13 | 120 48 | 166 26 |
| 22 | 7 23  | 20 12 | 41 42 | 77 37 | 122 20 | 167 57 |
| 23 | 7 45  | 20 44 | 42 39 | 79 2  | 123 52 | 169 27 |
| 24 | 8 6   | 21 16 | 43 38 | 80 27 | 125 24 | 170 58 |
| 25 | 8 26  | 21 49 | 44 38 | 81 53 | 126 55 | 172 28 |
| 26 | 8 50  | 22 22 | 45 39 | 83 19 | 128 37 | 173 59 |
| 27 | 9 13  | 22 56 | 46 41 | 84 46 | 129 59 | 175 29 |
| 28 | 9 35  | 23 31 | 47 44 | 86 13 | 131 30 | 177 0  |
| 29 | 9 58  | 24 7  | 48 48 | 87 40 | 133 2  | 178 30 |
| 30 | 10 21 | 24 44 | 49 52 | 89 8  | 134 33 | 180 0  |



Ad latitudinem .56. Graduum

|    | a   |    | m   |    | p   |    | s   |    | z   |    | x   |    |
|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
|    | b   | m  | b   | m  | b   | m  | b   | m  | b   | m  | b   | m  |
| 0  | 180 | 0  | 225 | 27 | 270 | 52 | 310 | 8  | 335 | 16 | 349 | 39 |
| 1  | 181 | 30 | 226 | 58 | 272 | 20 | 311 | 12 | 335 | 53 | 350 | 2  |
| 2  | 183 | 0  | 228 | 30 | 273 | 47 | 312 | 16 | 336 | 29 | 350 | 25 |
| 3  | 184 | 31 | 230 | 1  | 275 | 14 | 313 | 19 | 337 | 4  | 350 | 47 |
| 4  | 186 | 1  | 231 | 33 | 276 | 41 | 314 | 21 | 337 | 38 | 351 | 10 |
| 5  | 187 | 32 | 233 | 5  | 278 | 7  | 315 | 22 | 338 | 11 | 351 | 32 |
| 6  | 189 | 2  | 234 | 36 | 279 | 33 | 316 | 22 | 338 | 44 | 351 | 54 |
| 7  | 190 | 33 | 236 | 8  | 280 | 58 | 317 | 21 | 339 | 16 | 352 | 15 |
| 8  | 192 | 3  | 237 | 40 | 282 | 23 | 318 | 18 | 339 | 48 | 352 | 37 |
| 9  | 193 | 34 | 239 | 12 | 283 | 47 | 319 | 14 | 340 | 20 | 352 | 58 |
| 10 | 195 | 5  | 240 | 44 | 285 | 10 | 320 | 9  | 340 | 51 | 353 | 19 |
| 11 | 196 | 35 | 242 | 16 | 286 | 33 | 321 | 3  | 341 | 21 | 353 | 40 |
| 12 | 198 | 6  | 243 | 48 | 287 | 55 | 321 | 56 | 341 | 51 | 354 | 1  |
| 13 | 199 | 37 | 245 | 19 | 289 | 16 | 322 | 48 | 342 | 21 | 354 | 22 |
| 14 | 201 | 8  | 246 | 50 | 290 | 37 | 323 | 40 | 342 | 50 | 354 | 43 |
| 15 | 202 | 39 | 248 | 21 | 291 | 57 | 324 | 31 | 343 | 19 | 355 | 3  |
| 16 | 204 | 9  | 249 | 53 | 293 | 16 | 325 | 21 | 343 | 47 | 355 | 23 |
| 17 | 205 | 40 | 251 | 24 | 294 | 34 | 326 | 10 | 344 | 14 | 355 | 43 |
| 18 | 207 | 11 | 252 | 55 | 295 | 51 | 326 | 57 | 344 | 41 | 356 | 3  |
| 19 | 208 | 42 | 254 | 26 | 297 | 7  | 327 | 43 | 345 | 8  | 356 | 23 |
| 20 | 210 | 13 | 255 | 57 | 298 | 23 | 328 | 28 | 345 | 34 | 356 | 43 |
| 21 | 211 | 44 | 257 | 27 | 299 | 38 | 329 | 12 | 346 | 0  | 357 | 3  |
| 22 | 213 | 15 | 258 | 57 | 300 | 52 | 329 | 55 | 346 | 26 | 357 | 23 |
| 23 | 214 | 47 | 260 | 27 | 302 | 5  | 330 | 38 | 346 | 51 | 357 | 43 |
| 24 | 216 | 18 | 261 | 57 | 303 | 17 | 331 | 20 | 347 | 16 | 358 | 3  |
| 25 | 217 | 50 | 263 | 27 | 304 | 28 | 332 | 1  | 347 | 41 | 358 | 22 |
| 26 | 219 | 21 | 264 | 56 | 305 | 38 | 332 | 42 | 348 | 5  | 358 | 42 |
| 27 | 220 | 52 | 266 | 25 | 306 | 47 | 333 | 22 | 348 | 29 | 359 | 2  |
| 28 | 222 | 24 | 267 | 54 | 307 | 55 | 334 | 1  | 348 | 53 | 359 | 21 |
| 29 | 223 | 55 | 269 | 23 | 309 | 2  | 334 | 39 | 349 | 16 | 359 | 41 |
| 30 | 225 | 27 | 270 | 52 | 310 | 8  | 335 | 16 | 349 | 39 | 360 | 0  |



# Tabula Ascensionum Obliquarum

|    | γ    | δ     | ε     | ζ     | η      | θ      |
|----|------|-------|-------|-------|--------|--------|
| δ  | δ m  | δ m   | δ m   | δ m   | δ m    | δ m    |
| 0  | 0 0  | 9 39  | 23 17 | 47 58 | 87 41  | 133 51 |
| 1  | 0 18 | 10 0  | 23 53 | 49 5  | 89 11  | 135 24 |
| 2  | 0 36 | 10 22 | 24 30 | 50 12 | 90 41  | 136 57 |
| 3  | 0 54 | 10 44 | 25 7  | 51 20 | 92 11  | 138 30 |
| 4  | 1 12 | 11 6  | 25 45 | 52 29 | 93 42  | 140 3  |
| 5  | 1 31 | 11 29 | 26 24 | 53 39 | 95 13  | 141 35 |
| 6  | 1 49 | 11 52 | 27 4  | 54 50 | 96 44  | 143 8  |
| 7  | 2 7  | 12 16 | 27 45 | 56 2  | 98 15  | 144 41 |
| 8  | 2 26 | 12 40 | 28 27 | 57 15 | 99 47  | 146 14 |
| 9  | 2 44 | 13 4  | 29 9  | 58 30 | 101 19 | 147 47 |
| 10 | 3 3  | 13 29 | 29 52 | 59 46 | 102 51 | 149 19 |
| 11 | 3 21 | 13 54 | 30 36 | 61 3  | 104 23 | 150 52 |
| 12 | 3 40 | 14 19 | 31 21 | 62 20 | 105 56 | 152 24 |
| 13 | 3 59 | 14 45 | 32 7  | 63 38 | 107 29 | 153 57 |
| 14 | 4 18 | 15 11 | 32 54 | 64 57 | 109 2  | 155 29 |
| 15 | 4 37 | 15 37 | 33 43 | 66 17 | 110 35 | 157 1  |
| 16 | 4 56 | 16 4  | 34 33 | 67 38 | 112 7  | 158 33 |
| 17 | 5 15 | 16 32 | 35 24 | 69 0  | 113 40 | 160 5  |
| 18 | 5 34 | 17 0  | 36 15 | 70 23 | 115 13 | 161 47 |
| 19 | 5 53 | 17 28 | 37 7  | 71 46 | 116 46 | 163 9  |
| 20 | 6 13 | 17 57 | 38 0  | 73 10 | 118 19 | 164 41 |
| 21 | 6 33 | 18 26 | 38 55 | 74 34 | 119 52 | 166 13 |
| 22 | 6 53 | 18 56 | 39 51 | 75 59 | 121 25 | 167 45 |
| 23 | 7 13 | 19 26 | 40 48 | 77 25 | 122 38 | 169 17 |
| 24 | 7 33 | 19 57 | 41 46 | 78 51 | 124 31 | 170 49 |
| 25 | 7 53 | 20 29 | 42 45 | 80 18 | 126 5  | 172 21 |
| 26 | 8 14 | 21 1  | 43 46 | 81 46 | 127 39 | 173 53 |
| 27 | 8 35 | 21 34 | 44 48 | 83 14 | 129 12 | 175 25 |
| 28 | 8 56 | 22 8  | 45 51 | 84 43 | 130 45 | 176 57 |
| 29 | 9 17 | 22 42 | 46 54 | 86 12 | 132 18 | 178 29 |
| 30 | 9 39 | 23 17 | 47 58 | 87 41 | 133 51 | 180 0  |



Ad latitudinem .57. Graduum

14



# Tabula Ascensionum Obliquarum

|    | γ    | δ     | π     | ε     | ζ      | η      |
|----|------|-------|-------|-------|--------|--------|
| h  | h m  | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0  | 8 54  | 21 43 | 45 54 | 86 7   | 133 6  |
| 1  | 0 16 | 9 14  | 22 17 | 47 0  | 87 38  | 134 41 |
| 2  | 0 33 | 9 34  | 22 52 | 48 7  | 89 10  | 136 15 |
| 3  | 0 50 | 9 55  | 23 28 | 49 15 | 90 42  | 137 50 |
| 4  | 1 7  | 10 16 | 24 5  | 50 25 | 92 14  | 139 24 |
| 5  | 1 24 | 10 37 | 24 43 | 51 36 | 93 47  | 140 58 |
| 6  | 1 48 | 10 59 | 25 21 | 52 48 | 95 20  | 142 33 |
| 7  | 1 57 | 11 21 | 26 0  | 54 1  | 96 53  | 144 7  |
| 8  | 2 14 | 11 43 | 26 40 | 55 16 | 98 26  | 145 41 |
| 9  | 2 31 | 12 5  | 27 21 | 56 31 | 99 59  | 147 15 |
| 10 | 2 48 | 12 28 | 28 3  | 57 47 | 101 33 | 148 49 |
| 11 | 3 5  | 12 51 | 28 46 | 59 4  | 103 7  | 150 23 |
| 12 | 3 22 | 13 15 | 29 30 | 60 22 | 104 42 | 151 57 |
| 13 | 3 40 | 13 39 | 30 15 | 61 41 | 106 16 | 153 31 |
| 14 | 3 57 | 14 3  | 31 1  | 63 1  | 107 51 | 155 5  |
| 15 | 4 15 | 14 28 | 31 48 | 64 22 | 109 26 | 156 39 |
| 16 | 4 32 | 14 53 | 32 36 | 65 44 | 111 0  | 158 13 |
| 17 | 4 50 | 15 19 | 33 25 | 67 7  | 112 34 | 159 46 |
| 18 | 5 7  | 15 45 | 34 16 | 68 31 | 114 9  | 161 20 |
| 19 | 5 25 | 16 12 | 35 8  | 69 56 | 115 43 | 162 53 |
| 20 | 5 43 | 16 39 | 36 1  | 71 21 | 117 18 | 164 26 |
| 21 | 6 1  | 17 7  | 36 55 | 72 47 | 118 53 | 166 0  |
| 22 | 6 20 | 17 35 | 37 50 | 74 14 | 120 28 | 167 34 |
| 23 | 6 38 | 18 4  | 38 46 | 75 41 | 122 3  | 169 7  |
| 24 | 6 57 | 18 33 | 39 43 | 77 9  | 123 38 | 170 41 |
| 25 | 7 16 | 19 3  | 40 42 | 78 37 | 125 13 | 172 14 |
| 26 | 7 35 | 19 33 | 41 42 | 80 6  | 126 48 | 173 48 |
| 27 | 7 54 | 20 4  | 42 43 | 81 36 | 128 23 | 175 21 |
| 28 | 8 14 | 20 36 | 43 45 | 83 6  | 129 57 | 176 54 |
| 29 | 8 34 | 21 9  | 44 49 | 84 36 | 131 32 | 178 27 |
| 30 | 8 54 | 21 43 | 45 54 | 86 7  | 133 6  | 180 0  |



Ad latitudinem .58. Graduum

|    | ☿      | ♈      | ♉      | ♊      | ♋      | ♌      | ♍   |
|----|--------|--------|--------|--------|--------|--------|-----|
|    | h m    | h m    | h m    | h m    | h m    | h m    | h m |
| 0  | 180 0  | 226 54 | 273 53 | 314 6  | 338 17 | 351 6  |     |
| 1  | 181 33 | 228 28 | 275 24 | 315 11 | 338 51 | 351 26 |     |
| 2  | 183 6  | 230 3  | 276 54 | 316 15 | 339 24 | 351 46 |     |
| 3  | 184 39 | 231 37 | 278 24 | 317 17 | 339 56 | 352 6  |     |
| 4  | 186 12 | 233 12 | 279 54 | 318 18 | 340 27 | 352 25 |     |
| 5  | 187 46 | 234 47 | 281 23 | 319 18 | 340 57 | 352 44 |     |
| 6  | 189 19 | 236 22 | 282 51 | 320 17 | 341 27 | 353 3  |     |
| 7  | 190 53 | 237 57 | 284 19 | 321 14 | 341 56 | 353 22 |     |
| 8  | 192 26 | 239 32 | 285 46 | 322 10 | 342 25 | 353 40 |     |
| 9  | 194 0  | 241 7  | 287 13 | 323 5  | 342 53 | 353 59 |     |
| 10 | 195 34 | 242 42 | 288 39 | 323 59 | 343 21 | 354 17 |     |
| 11 | 197 7  | 244 17 | 290 4  | 324 52 | 343 48 | 354 35 |     |
| 12 | 198 40 | 245 51 | 291 29 | 325 44 | 344 15 | 354 53 |     |
| 13 | 200 14 | 247 26 | 292 53 | 326 35 | 344 41 | 355 10 |     |
| 14 | 201 47 | 249 0  | 294 16 | 327 24 | 345 7  | 355 28 |     |
| 15 | 203 21 | 250 34 | 295 38 | 328 12 | 345 32 | 355 45 |     |
| 16 | 204 55 | 252 9  | 296 59 | 328 59 | 345 57 | 356 3  |     |
| 17 | 206 29 | 253 44 | 298 19 | 329 45 | 346 21 | 356 20 |     |
| 18 | 208 3  | 255 18 | 299 38 | 330 30 | 346 45 | 356 38 |     |
| 19 | 209 37 | 256 53 | 300 56 | 331 14 | 347 9  | 356 55 |     |
| 20 | 211 11 | 258 27 | 302 13 | 331 57 | 347 32 | 357 12 |     |
| 21 | 212 45 | 260 1  | 303 29 | 332 39 | 347 55 | 357 29 |     |
| 22 | 214 19 | 261 34 | 304 44 | 333 20 | 348 17 | 357 46 |     |
| 23 | 215 53 | 263 7  | 305 59 | 334 0  | 348 39 | 358 13 |     |
| 24 | 217 27 | 264 40 | 307 12 | 334 39 | 349 1  | 358 20 |     |
| 25 | 219 2  | 266 13 | 308 24 | 335 17 | 349 23 | 358 36 |     |
| 26 | 220 36 | 267 46 | 309 35 | 335 55 | 349 44 | 358 53 |     |
| 27 | 222 10 | 269 18 | 310 45 | 336 32 | 350 5  | 359 10 |     |
| 28 | 223 45 | 270 50 | 311 53 | 337 8  | 350 26 | 359 27 |     |
| 29 | 225 19 | 272 22 | 313 0  | 337 43 | 350 46 | 359 44 |     |
| 30 | 226 54 | 273 53 | 314 6  | 338 17 | 351 6  | 360 0  |     |



# Tabula Ascensionum Obliquarum

| h  | γ    | δ     | π     | ε     | ζ      | η      |
|----|------|-------|-------|-------|--------|--------|
| h  | h m  | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0  | 8 6   | 20 2  | 43 39 | 84 26  | 132 18 |
| 1  | 0 15 | 8 25  | 20 34 | 44 45 | 85 59  | 133 55 |
| 2  | 0 30 | 8 44  | 21 7  | 45 52 | 87 33  | 135 31 |
| 3  | 0 45 | 9 3   | 21 41 | 47 1  | 89 7   | 137 7  |
| 4  | 1 0  | 9 22  | 22 16 | 48 11 | 90 4   | 138 43 |
| 5  | 1 6  | 9 41  | 22 53 | 49 22 | 92 15  | 140 19 |
| 6  | 1 31 | 10 1  | 23 30 | 50 34 | 93 50  | 141 55 |
| 7  | 1 46 | 10 21 | 24 8  | 51 48 | 95 25  | 143 31 |
| 8  | 2 2  | 10 42 | 24 46 | 53 3  | 97 0   | 145 7  |
| 9  | 2 17 | 11 3  | 25 25 | 54 19 | 98 35  | 146 43 |
| 10 | 2 33 | 11 24 | 26 5  | 55 36 | 100 11 | 148 18 |
| 11 | 2 48 | 11 45 | 26 46 | 56 54 | 101 47 | 149 54 |
| 12 | 3 4  | 12 7  | 27 28 | 58 13 | 103 23 | 151 29 |
| 13 | 3 19 | 12 29 | 28 12 | 59 33 | 104 59 | 153 5  |
| 14 | 3 35 | 12 51 | 28 57 | 60 54 | 106 35 | 154 40 |
| 15 | 3 51 | 13 14 | 29 43 | 62 17 | 108 12 | 156 15 |
| 16 | 4 7  | 13 38 | 30 30 | 63 41 | 109 48 | 157 51 |
| 17 | 4 23 | 14 2  | 31 18 | 65 5  | 111 24 | 159 26 |
| 18 | 4 39 | 14 27 | 32 7  | 66 30 | 113 1  | 161 1  |
| 19 | 4 55 | 14 52 | 32 58 | 67 56 | 114 37 | 162 36 |
| 20 | 5 12 | 15 17 | 33 50 | 69 23 | 116 14 | 164 11 |
| 21 | 5 29 | 15 43 | 34 43 | 70 51 | 117 50 | 165 46 |
| 22 | 5 46 | 16 9  | 35 37 | 72 18 | 119 27 | 167 21 |
| 23 | 6 3  | 16 36 | 36 33 | 73 48 | 121 4  | 168 56 |
| 24 | 6 20 | 17 3  | 37 30 | 75 17 | 122 41 | 170 31 |
| 25 | 6 37 | 17 31 | 38 28 | 76 47 | 124 17 | 172 6  |
| 26 | 6 54 | 18 0  | 39 28 | 78 18 | 125 54 | 173 41 |
| 27 | 7 12 | 18 30 | 40 29 | 79 49 | 127 30 | 175 16 |
| 28 | 7 38 | 19 0  | 41 31 | 81 23 | 129 6  | 176 51 |
| 29 | 7 48 | 19 31 | 42 34 | 82 53 | 130 42 | 178 26 |
| 30 | 8 6  | 20 2  | 43 39 | 84 26 | 132 18 | 180 0  |



Ad latitudinem .59. Graduum.

| S  | S m    | S m    | S m    | S m    | S m    | S m    |
|----|--------|--------|--------|--------|--------|--------|
| 0  | 180 0  | 227 42 | 275 34 | 316 21 | 339 58 | 351 54 |
| 1  | 181 34 | 229 18 | 277 7  | 317 26 | 340 29 | 352 12 |
| 2  | 183 9  | 230 54 | 278 39 | 318 29 | 341 0  | 352 30 |
| 3  | 184 44 | 232 30 | 280 11 | 319 31 | 341 30 | 352 48 |
| 4  | 186 19 | 234 6  | 281 42 | 320 32 | 342 0  | 353 6  |
| 5  | 187 54 | 235 43 | 283 13 | 321 32 | 342 29 | 353 23 |
| 6  | 189 29 | 237 19 | 284 43 | 322 30 | 342 57 | 353 40 |
| 7  | 191 4  | 238 56 | 286 12 | 323 27 | 343 24 | 353 57 |
| 8  | 192 39 | 240 33 | 287 41 | 324 23 | 343 51 | 354 14 |
| 9  | 194 14 | 242 10 | 289 9  | 325 17 | 344 17 | 354 31 |
| 10 | 195 49 | 243 46 | 290 37 | 326 10 | 344 43 | 354 48 |
| 11 | 197 24 | 245 23 | 292 4  | 327 2  | 345 8  | 355 5  |
| 12 | 198 59 | 246 59 | 293 30 | 327 53 | 345 33 | 355 21 |
| 13 | 200 34 | 248 36 | 294 55 | 328 42 | 345 58 | 355 37 |
| 14 | 202 9  | 250 12 | 296 19 | 329 30 | 346 22 | 355 53 |
| 15 | 203 45 | 251 48 | 297 43 | 330 17 | 346 46 | 356 9  |
| 16 | 205 20 | 253 25 | 299 6  | 331 3  | 347 9  | 356 25 |
| 17 | 206 55 | 255 1  | 300 27 | 331 48 | 347 31 | 356 41 |
| 18 | 208 31 | 256 37 | 301 47 | 332 32 | 347 53 | 356 56 |
| 19 | 210 6  | 258 13 | 303 6  | 333 14 | 348 15 | 357 12 |
| 20 | 211 42 | 259 49 | 304 24 | 333 55 | 348 36 | 357 27 |
| 21 | 213 17 | 261 25 | 305 41 | 334 32 | 348 57 | 357 43 |
| 22 | 214 53 | 263 0  | 306 57 | 335 14 | 349 18 | 357 58 |
| 23 | 216 29 | 264 35 | 308 12 | 335 52 | 349 39 | 358 14 |
| 24 | 218 5  | 266 10 | 309 26 | 336 30 | 349 59 | 358 29 |
| 25 | 219 41 | 267 45 | 310 38 | 337 7  | 350 19 | 358 44 |
| 26 | 221 17 | 269 19 | 311 49 | 337 44 | 350 38 | 359 0  |
| 27 | 222 53 | 270 53 | 312 59 | 338 19 | 350 57 | 359 15 |
| 28 | 224 29 | 272 27 | 314 8  | 338 53 | 351 16 | 359 30 |
| 29 | 226 5  | 274 1  | 315 15 | 339 26 | 351 35 | 359 45 |
| 30 | 227 42 | 275 34 | 316 21 | 339 58 | 351 54 | 360 0  |



# Tabula Ascensionum Obliquarum

|    | ♈    | ♉     | ♊     | ♋     | ♌      | ♍      |
|----|------|-------|-------|-------|--------|--------|
| h  | h m  | h m   | h m   | h m   | h m    | h m    |
| 0  | 0 0  | 7 16  | 18 12 | 41 8  | 82 36  | 131 28 |
| 1  | 0 13 | 7 33  | 18 42 | 42 14 | 84 11  | 133 6  |
| 2  | 0 27 | 7 50  | 19 13 | 43 22 | 85 47  | 134 44 |
| 3  | 0 40 | 8 7   | 19 45 | 44 31 | 87 23  | 136 22 |
| 4  | 0 54 | 8 24  | 20 18 | 45 41 | 88 59  | 138 0  |
| 5  | 1 8  | 8 41  | 20 53 | 46 53 | 90 36  | 139 37 |
| 6  | 1 21 | 8 59  | 21 28 | 48 6  | 92 13  | 141 15 |
| 7  | 1 35 | 9 17  | 22 4  | 49 20 | 93 50  | 142 53 |
| 8  | 1 49 | 9 36  | 22 40 | 50 36 | 95 27  | 144 30 |
| 9  | 2 3  | 9 55  | 23 17 | 51 53 | 97 4   | 146 8  |
| 10 | 2 17 | 10 15 | 23 55 | 53 11 | 98 42  | 147 45 |
| 11 | 2 31 | 10 35 | 24 35 | 54 30 | 100 20 | 149 23 |
| 12 | 2 45 | 10 55 | 25 16 | 55 50 | 101 58 | 151 0  |
| 13 | 2 59 | 11 15 | 25 58 | 57 12 | 103 36 | 152 37 |
| 14 | 3 13 | 11 35 | 26 41 | 58 35 | 105 14 | 154 14 |
| 15 | 3 17 | 11 55 | 27 25 | 59 59 | 106 53 | 155 51 |
| 16 | 3 41 | 12 16 | 28 10 | 61 24 | 108 31 | 157 28 |
| 17 | 3 55 | 12 38 | 28 57 | 62 50 | 110 9  | 159 5  |
| 18 | 4 10 | 13 1  | 29 45 | 64 17 | 111 47 | 160 42 |
| 19 | 4 24 | 13 24 | 30 34 | 65 45 | 113 26 | 162 19 |
| 20 | 4 39 | 13 48 | 31 25 | 67 13 | 115 5  | 163 55 |
| 21 | 4 54 | 14 12 | 32 17 | 68 42 | 116 44 | 165 32 |
| 22 | 5 9  | 14 36 | 33 10 | 70 12 | 118 23 | 167 9  |
| 23 | 5 24 | 15 1  | 34 5  | 71 43 | 120 1  | 168 45 |
| 24 | 5 39 | 15 26 | 35 1  | 73 15 | 121 39 | 170 22 |
| 25 | 5 55 | 15 52 | 35 59 | 74 47 | 123 17 | 171 58 |
| 26 | 6 11 | 16 19 | 36 58 | 76 20 | 124 56 | 173 35 |
| 27 | 6 27 | 16 47 | 37 58 | 77 53 | 126 34 | 175 11 |
| 28 | 6 43 | 17 15 | 39 0  | 79 27 | 128 12 | 176 48 |
| 29 | 6 59 | 17 43 | 40 3  | 81 1  | 129 50 | 178 24 |
| 30 | 7 16 | 18 12 | 41 8  | 82 36 | 131 28 | 180 0  |



Ad latitudinem .60. Graduum.

|    | ♈      | ♉      | ♊      | ♋      | ♌      | ♍      |
|----|--------|--------|--------|--------|--------|--------|
|    | h m    | h m    | h m    | h m    | h m    | h m    |
| 0  | 180 0  | 228 32 | 277 24 | 318 52 | 341 48 | 352 44 |
| 1  | 181 36 | 230 10 | 278 59 | 319 57 | 342 17 | 353 1  |
| 2  | 183 12 | 231 48 | 280 33 | 321 0  | 342 45 | 353 17 |
| 3  | 184 49 | 233 26 | 282 7  | 322 2  | 343 13 | 353 33 |
| 4  | 186 25 | 245 4  | 283 40 | 323 2  | 343 41 | 353 49 |
| 5  | 188 2  | 236 43 | 285 13 | 324 1  | 344 8  | 354 5  |
| 6  | 189 38 | 238 21 | 286 45 | 324 59 | 344 34 | 354 21 |
| 7  | 191 15 | 239 59 | 288 17 | 325 55 | 344 59 | 354 36 |
| 8  | 192 51 | 241 37 | 289 48 | 326 50 | 345 24 | 354 51 |
| 9  | 194 28 | 243 16 | 291 18 | 327 43 | 345 48 | 355 6  |
| 10 | 196 5  | 244 55 | 292 47 | 328 35 | 346 12 | 355 21 |
| 11 | 197 41 | 246 34 | 294 15 | 329 26 | 346 36 | 355 36 |
| 12 | 199 18 | 248 13 | 295 43 | 330 15 | 346 59 | 355 50 |
| 13 | 200 55 | 249 51 | 297 10 | 331 3  | 347 22 | 356 5  |
| 14 | 202 32 | 251 29 | 298 36 | 331 50 | 347 44 | 356 19 |
| 15 | 204 9  | 253 7  | 300 1  | 332 35 | 348 5  | 356 33 |
| 16 | 205 46 | 254 46 | 301 25 | 333 19 | 348 25 | 356 47 |
| 17 | 207 23 | 256 24 | 302 48 | 334 2  | 348 45 | 357 1  |
| 18 | 209 0  | 258 2  | 304 10 | 334 44 | 349 5  | 357 15 |
| 19 | 210 37 | 259 40 | 305 30 | 335 25 | 349 25 | 357 29 |
| 20 | 212 15 | 261 18 | 306 49 | 336 5  | 349 45 | 357 43 |
| 21 | 213 52 | 262 56 | 308 7  | 336 43 | 350 5  | 357 57 |
| 22 | 215 30 | 264 33 | 309 24 | 337 20 | 350 24 | 358 11 |
| 23 | 217 7  | 266 10 | 310 40 | 337 56 | 350 43 | 358 25 |
| 24 | 218 45 | 267 47 | 311 54 | 338 32 | 351 1  | 358 39 |
| 25 | 220 23 | 269 24 | 313 7  | 339 7  | 351 19 | 358 52 |
| 26 | 222 0  | 271 1  | 314 19 | 339 42 | 351 36 | 359 6  |
| 27 | 223 38 | 272 37 | 315 29 | 340 15 | 351 53 | 359 20 |
| 28 | 225 16 | 274 13 | 316 38 | 340 47 | 352 10 | 359 33 |
| 29 | 226 54 | 275 49 | 317 46 | 341 18 | 352 27 | 359 47 |
| 30 | 228 32 | 277 24 | 318 52 | 341 48 | 352 44 | 360 0  |



Tabula domoz fin Campani z Bazulum

| Cantus 7 | Decie  |    |                    |    | Undecie |    |                    |    | Unde. | Decie |    |                    |        | Undecie |    |                    |       | Unde. | Duode. |  |       |  |  |  |
|----------|--------|----|--------------------|----|---------|----|--------------------|----|-------|-------|----|--------------------|--------|---------|----|--------------------|-------|-------|--------|--|-------|--|--|--|
|          | Inter  |    | Numer <sup>9</sup> |    | Inter   |    | Numer <sup>9</sup> |    |       | Inter |    | Numer <sup>9</sup> |        | Inter   |    | Numer <sup>9</sup> |       |       |        |  |       |  |  |  |
|          | D      | m  | D                  | m  | D       | m  | D                  | m  |       | D     | m  | D                  | m      | D       | m  | D                  | m     | D     | m      |  |       |  |  |  |
| 0        | 30     | 0  | 0                  | 0  | 30      | 0  | 0                  | 0  | 31    | 26    | 19 | 14                 | 55     | 29      | 43 | 26                 | 29    |       |        |  |       |  |  |  |
| 1        | 30     | 0  | 0                  | 30 | 30      | 0  | 0                  | 52 | 32    | 26    | 5  | 15                 | 22     | 29      | 40 | 27                 | 19    |       |        |  |       |  |  |  |
| 2        | 29     | 59 | 1                  | 0  | 30      | 0  | 1                  | 44 | 33    | 25    | 50 | 15                 | 48     | 29      | 37 | 28                 | 9     |       |        |  |       |  |  |  |
| 3        | 29     | 58 | 1                  | 30 | 30      | 0  | 2                  | 36 | 34    | 25    | 35 | 16                 | 14     | 29      | 33 | 28                 | 58    |       |        |  |       |  |  |  |
| 4        | 29     | 56 | 2                  | 0  | 30      | 0  | 3                  | 28 | 35    | 25    | 19 | 16                 | 40     | 29      | 30 | 29                 | 47    |       |        |  |       |  |  |  |
| 5        | 29     | 54 | 2                  | 30 | 30      | 0  | 4                  | 20 | 36    | 24    | 3  | 17                 | 5      | 29      | 26 | 30                 | 36    |       |        |  |       |  |  |  |
| 6        | 29     | 51 | 3                  | 0  | 30      | 0  | 5                  | 12 | 37    | 24    | 46 | 17                 | 31     | 29      | 22 | 31                 | 25    |       |        |  |       |  |  |  |
| 7        | 29     | 48 | 3                  | 30 | 30      | 0  | 6                  | 4  | 38    | 24    | 29 | 17                 | 56     | 29      | 17 | 32                 | 14    |       |        |  |       |  |  |  |
| 8        | 29     | 45 | 3                  | 59 | 30      | 0  | 6                  | 55 | 39    | 24    | 11 | 18                 | 20     | 29      | 12 | 33                 | 2     |       |        |  |       |  |  |  |
| 9        | 29     | 41 | 4                  | 29 | 30      | 0  | 7                  | 47 | 40    | 23    | 53 | 18                 | 45     | 29      | 6  | 33                 | 50    |       |        |  |       |  |  |  |
| 10       | 29     | 37 | 4                  | 59 | 30      | 0  | 8                  | 39 | 41    | 23    | 34 | 19                 | 9      | 29      | 0  | 34                 | 38    |       |        |  |       |  |  |  |
| 11       | 29     | 32 | 5                  | 28 | 30      | 0  | 9                  | 31 | 42    | 23    | 14 | 19                 | 33     | 28      | 54 | 35                 | 25    |       |        |  |       |  |  |  |
| 12       | 29     | 27 | 5                  | 58 | 30      | 0  | 10                 | 22 | 43    | 22    | 54 | 19                 | 56     | 28      | 47 | 36                 | 12    |       |        |  |       |  |  |  |
| 13       | 29     | 21 | 6                  | 28 | 30      | 0  | 11                 | 14 | 44    | 22    | 34 | 20                 | 19     | 28      | 39 | 36                 | 59    |       |        |  |       |  |  |  |
| 14       | 29     | 15 | 6                  | 57 | 30      | 0  | 12                 | 6  | 45    | 22    | 13 | 20                 | 42     | 28      | 32 | 37                 | 46    |       |        |  |       |  |  |  |
| 15       | 29     | 9  | 7                  | 26 | 29      | 59 | 12                 | 58 | 46    | 21    | 51 | 21                 | 5      | 28      | 24 | 38                 | 32    |       |        |  |       |  |  |  |
| 16       | 29     | 2  | 7                  | 55 | 29      | 59 | 13                 | 49 | 47    | 21    | 29 | 21                 | 27     | 28      | 15 | 39                 | 18    |       |        |  |       |  |  |  |
| 17       | 28     | 55 | 8                  | 24 | 29      | 58 | 14                 | 41 | 48    | 21    | 7  | 21                 | 49     | 28      | 5  | 40                 | 4     |       |        |  |       |  |  |  |
| 18       | 28     | 47 | 8                  | 53 | 29      | 58 | 15                 | 32 | 49    | 20    | 44 | 22                 | 10     | 27      | 55 | 40                 | 49    |       |        |  |       |  |  |  |
| 19       | 28     | 38 | 9                  | 22 | 29      | 58 | 16                 | 23 | 50    | 20    | 21 | 22                 | 31     | 27      | 43 | 41                 | 34    |       |        |  |       |  |  |  |
| 20       | 28     | 29 | 9                  | 51 | 29      | 57 | 17                 | 14 | 51    | 19    | 58 | 22                 | 52     | 27      | 30 | 42                 | 18    |       |        |  |       |  |  |  |
| 21       | 28     | 19 | 10                 | 19 | 29      | 57 | 18                 | 5  | 52    | 19    | 34 | 23                 | 12     | 27      | 16 | 43                 | 2     |       |        |  |       |  |  |  |
| 22       | 28     | 9  | 10                 | 48 | 29      | 57 | 18                 | 56 | 53    | 19    | 10 | 23                 | 32     | 27      | 1  | 43                 | 45    |       |        |  |       |  |  |  |
| 23       | 27     | 59 | 11                 | 16 | 29      | 56 | 19                 | 47 | 54    | 18    | 45 | 23                 | 52     | 26      | 46 | 44                 | 28    |       |        |  |       |  |  |  |
| 24       | 27     | 48 | 11                 | 44 | 29      | 55 | 20                 | 37 | 55    | 18    | 20 | 24                 | 11     | 26      | 29 | 45                 | 11    |       |        |  |       |  |  |  |
| 25       | 27     | 37 | 12                 | 12 | 29      | 54 | 21                 | 28 | 56    | 17    | 54 | 24                 | 29     | 26      | 11 | 45                 | 53    |       |        |  |       |  |  |  |
| 26       | 27     | 25 | 12                 | 40 | 29      | 53 | 22                 | 18 | 57    | 17    | 28 | 24                 | 48     | 25      | 52 | 46                 | 35    |       |        |  |       |  |  |  |
| 27       | 27     | 13 | 13                 | 7  | 29      | 51 | 23                 | 9  | 58    | 17    | 1  | 25                 | 5      | 25      | 32 | 47                 | 16    |       |        |  |       |  |  |  |
| 28       | 27     | 0  | 13                 | 35 | 29      | 49 | 23                 | 59 | 59    | 16    | 33 | 25                 | 23     | 25      | 11 | 47                 | 56    |       |        |  |       |  |  |  |
| 29       | 26     | 47 | 14                 | 2  | 29      | 47 | 24                 | 49 | 60    | 16    | 5  | 25                 | 40     | 24      | 48 | 48                 | 36    |       |        |  |       |  |  |  |
| 30       | 26     | 33 | 14                 | 29 | 29      | 45 | 25                 | 39 |       |       |    |                    |        |         |    |                    |       |       |        |  |       |  |  |  |
| Regio 1  | Tercie |    |                    |    | Secde   |    |                    |    | Secde |       |    |                    | Tercie |         |    |                    | Secde |       |        |  | Secde |  |  |  |



# Tabula Domorum Rationalis

| Latitudo<br>Septentrionalis | Undecie<br>Tercie<br>Numerus |    | Duodecie<br>Secunde<br>polaris |    | Latitudo | Undecie<br>Tercie<br>Numerus |    | Duodecie<br>Secunde<br>polaris |    |
|-----------------------------|------------------------------|----|--------------------------------|----|----------|------------------------------|----|--------------------------------|----|
|                             | B                            | m  | B                              | m  |          | B                            | m  | B                              | m  |
| 1                           | 0                            | 29 | 0                              | 51 | 31       | 16                           | 44 | 27                             | 29 |
| 2                           | 0                            | 59 | 1                              | 43 | 32       | 17                           | 21 | 28                             | 25 |
| 3                           | 1                            | 29 | 2                              | 35 | 33       | 17                           | 59 | 29                             | 21 |
| 4                           | 1                            | 59 | 3                              | 27 | 34       | 18                           | 38 | 30                             | 17 |
| 5                           | 2                            | 29 | 4                              | 19 | 35       | 19                           | 18 | 31                             | 14 |
| 6                           | 3                            | 0  | 5                              | 11 | 36       | 19                           | 58 | 32                             | 11 |
| 7                           | 3                            | 31 | 6                              | 4  | 37       | 20                           | 39 | 33                             | 8  |
| 8                           | 4                            | 2  | 6                              | 57 | 38       | 21                           | 20 | 34                             | 5  |
| 9                           | 4                            | 32 | 7                              | 49 | 39       | 22                           | 2  | 35                             | 2  |
| 10                          | 5                            | 3  | 8                              | 41 | 40       | 22                           | 45 | 36                             | 0  |
| 11                          | 5                            | 34 | 9                              | 33 | 41       | 23                           | 29 | 36                             | 58 |
| 12                          | 6                            | 5  | 10                             | 26 | 42       | 24                           | 14 | 37                             | 57 |
| 13                          | 6                            | 36 | 11                             | 18 | 43       | 25                           | 0  | 38                             | 56 |
| 14                          | 7                            | 7  | 12                             | 11 | 44       | 25                           | 47 | 39                             | 55 |
| 15                          | 7                            | 38 | 13                             | 4  | 45       | 26                           | 34 | 40                             | 54 |
| 16                          | 8                            | 9  | 13                             | 57 | 46       | 27                           | 22 | 41                             | 53 |
| 17                          | 8                            | 41 | 14                             | 50 | 47       | 28                           | 11 | 42                             | 53 |
| 18                          | 9                            | 13 | 15                             | 43 | 48       | 29                           | 2  | 43                             | 53 |
| 19                          | 9                            | 45 | 16                             | 36 | 49       | 29                           | 54 | 44                             | 54 |
| 20                          | 10                           | 18 | 17                             | 30 | 50       | 30                           | 47 | 45                             | 55 |
| 21                          | 10                           | 51 | 18                             | 23 | 51       | 31                           | 41 | 46                             | 56 |
| 22                          | 11                           | 25 | 19                             | 17 | 52       | 32                           | 37 | 47                             | 57 |
| 23                          | 11                           | 58 | 20                             | 11 | 53       | 33                           | 34 | 48                             | 59 |
| 24                          | 12                           | 32 | 21                             | 5  | 54       | 34                           | 32 | 50                             | 1  |
| 25                          | 13                           | 7  | 21                             | 59 | 55       | 35                           | 32 | 51                             | 3  |
| 26                          | 13                           | 42 | 22                             | 53 | 56       | 36                           | 33 | 52                             | 5  |
| 27                          | 14                           | 18 | 23                             | 48 | 57       | 37                           | 35 | 53                             | 8  |
| 28                          | 14                           | 54 | 24                             | 43 | 58       | 38                           | 39 | 54                             | 11 |
| 29                          | 15                           | 30 | 25                             | 38 | 59       | 39                           | 45 | 55                             | 14 |
| 30                          | 16                           | 7  | 26                             | 33 | 60       | 40                           | 53 | 56                             | 18 |
| Regio                       | None<br>Quinte               |    | Octave<br>Sexte                |    | Regio    | None<br>Quinte               |    | Octave<br>Sexte                |    |



pro parte pp. sic opor. ubi nec determinatio modif. na p. se opor.

# Tabula Positionum

| Elenatio | 1    | 2    | 3    | 4    | 5    | 6     | 7     |
|----------|------|------|------|------|------|-------|-------|
| B        | B m  | B m  | B m  | B m  | B m  | B m   | B m   |
| 32       | 1 44 | 3 28 | 5 13 | 6 57 | 8 43 | 10 28 | 12 14 |
| 31       | 1 43 | 3 25 | 5 8  | 6 51 | 8 36 | 10 19 | 12 4  |
| De       | 30   | 1 42 | 3 22 | 5 4  | 6 46 | 8 29  | 10 11 |
| di       | 29   | 1 40 | 3 20 | 5 0  | 6 40 | 8 22  | 10 2  |
| na       | 28   | 1 39 | 3 17 | 4 56 | 6 35 | 8 15  | 9 54  |
| rio      | 27   | 1 38 | 3 14 | 4 52 | 6 30 | 8 8   | 9 46  |
| Se       | 26   | 1 36 | 3 12 | 4 48 | 6 24 | 8 2   | 9 38  |
| pren     | 25   | 1 35 | 3 9  | 4 44 | 6 19 | 7 55  | 9 31  |
| trio     | 24   | 1 34 | 3 6  | 4 40 | 6 14 | 7 46  | 9 23  |
| na       | 23   | 1 32 | 3 4  | 4 37 | 6 9  | 7 42  | 9 15  |
| lis      | 22   | 1 31 | 3 2  | 4 33 | 6 4  | 7 37  | 9 8   |
| su       | 21   | 1 30 | 2 59 | 4 29 | 5 59 | 7 30  | 9 1   |
| pra      | 20   | 1 29 | 2 57 | 4 26 | 5 54 | 7 24  | 8 54  |
| ter      | 19   | 1 28 | 2 54 | 4 22 | 5 50 | 7 19  | 8 46  |
| tam      | 18   | 1 26 | 2 52 | 4 19 | 5 45 | 7 13  | 8 39  |
|          | 17   | 1 25 | 2 50 | 4 15 | 5 41 | 7 7   | 8 32  |
| Et       | 16   | 1 24 | 2 47 | 4 12 | 5 36 | 7 1   | 8 26  |
| 2De      | 15   | 1 23 | 2 45 | 4 8  | 5 31 | 6 56  | 8 19  |
| ri       | 14   | 1 22 | 2 43 | 4 5  | 5 27 | 6 50  | 8 12  |
| di       | 13   | 1 21 | 2 41 | 4 2  | 5 23 | 6 44  | 8 5   |
| ana      | 12   | 1 20 | 2 38 | 3 58 | 5 18 | 6 39  | 7 59  |
| sub      | 11   | 1 19 | 2 36 | 3 55 | 5 14 | 6 33  | 7 52  |
| ter      | 10   | 1 18 | 2 34 | 3 52 | 5 9  | 6 28  | 7 46  |
| ra       | 9    | 1 16 | 2 32 | 3 49 | 5 5  | 6 23  | 7 39  |
|          | 8    | 1 15 | 2 30 | 3 45 | 5 1  | 6 17  | 7 33  |
|          | 7    | 1 14 | 2 28 | 3 42 | 4 57 | 6 12  | 7 26  |
|          | 6    | 1 13 | 2 26 | 3 39 | 4 52 | 6 7   | 7 20  |
|          | 5    | 1 12 | 2 23 | 3 36 | 4 48 | 6 1   | 7 14  |
|          | 4    | 1 11 | 2 21 | 3 33 | 4 44 | 5 56  | 7 7   |
|          | 3    | 1 10 | 2 19 | 3 29 | 4 40 | 5 51  | 7 1   |
|          | 2    | 1 9  | 2 17 | 3 26 | 4 35 | 5 45  | 6 55  |
|          | 1    | 1 8  | 2 15 | 3 23 | 4 31 | 5 40  | 6 48  |
|          | 0    | 1 7  | 2 13 | 3 20 | 4 27 | 5 35  | 6 42  |



Ad .42. Gradus Latitudinis .

|    | 8     | 9     | 10    | 11    | 12    | 13    | 14    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |      |
| 32 | 14 1  | 15 49 | 17 38 | 19 27 | 21 17 | 23 9  | 25 3  |      |
| 31 | 13 50 | 15 36 | 17 23 | 19 10 | 20 59 | 22 49 | 24 42 |      |
| 30 | 13 38 | 15 23 | 17 9  | 18 55 | 20 42 | 22 31 | 24 22 |      |
| 29 | 13 27 | 15 10 | 16 55 | 18 39 | 20 25 | 22 12 | 24 2  |      |
| 28 | 13 16 | 14 58 | 16 41 | 18 24 | 20 8  | 21 54 | 23 42 |      |
| 27 | 13 5  | 14 46 | 16 27 | 18 9  | 19 52 | 21 36 | 23 23 |      |
| 26 | 12 55 | 14 34 | 16 14 | 17 54 | 19 36 | 21 19 | 23 4  |      |
| 25 | 12 44 | 14 22 | 16 1  | 17 40 | 19 20 | 21 2  | 22 46 |      |
| 24 | 12 34 | 14 11 | 15 48 | 17 26 | 19 5  | 20 45 | 22 27 |      |
| 23 | 12 24 | 13 59 | 15 36 | 17 12 | 18 50 | 20 28 | 22 10 |      |
| 22 | 12 14 | 13 48 | 15 23 | 16 58 | 18 35 | 20 12 | 21 52 |      |
| 21 | 12 5  | 13 37 | 15 11 | 16 45 | 18 20 | 19 56 | 21 35 |      |
| 20 | 11 55 | 13 26 | 14 59 | 16 31 | 18 5  | 19 40 | 21 17 |      |
| 19 | 11 45 | 13 16 | 14 47 | 16 18 | 17 51 | 19 25 | 21 0  |      |
| 18 | 11 36 | 13 5  | 14 35 | 16 5  | 17 37 | 19 9  | 20 44 |      |
| 17 | 11 27 | 12 55 | 14 23 | 15 52 | 17 23 | 18 54 | 20 27 |      |
| 16 | 11 18 | 12 44 | 14 12 | 15 40 | 17 9  | 18 39 | 20 11 |      |
| 15 | 11 9  | 12 34 | 14 0  | 15 27 | 16 55 | 18 24 | 19 55 |      |
| 14 | 10 59 | 12 24 | 13 49 | 15 15 | 16 41 | 18 9  | 19 39 |      |
| 13 | 10 51 | 12 14 | 13 38 | 15 2  | 16 28 | 17 54 | 19 23 |      |
| 12 | 10 42 | 12 4  | 13 27 | 14 50 | 16 14 | 17 40 | 19 7  |      |
| 11 | 10 33 | 11 54 | 13 16 | 14 36 | 16 1  | 17 25 | 18 52 |      |
| 10 | 10 24 | 11 44 | 13 5  | 14 26 | 15 48 | 17 11 | 18 36 |      |
| 9  | 10 15 | 11 34 | 12 54 | 14 14 | 15 35 | 16 57 | 18 21 |      |
| 8  | 10 7  | 11 24 | 12 43 | 14 2  | 15 22 | 16 43 | 18 5  |      |
| 7  | 9 58  | 11 15 | 12 32 | 13 50 | 15 9  | 16 28 | 17 50 |      |
| 6  | 9 50  | 11 5  | 12 22 | 13 38 | 14 56 | 16 14 | 17 35 |      |
| 5  | 9 41  | 10 56 | 12 11 | 13 26 | 14 43 | 16 0  | 17 20 |      |
| 4  | 9 33  | 10 46 | 12 0  | 13 15 | 14 30 | 15 47 | 17 5  |      |
| 3  | 9 24  | 10 37 | 11 50 | 13 3  | 14 17 | 15 33 | 16 50 |      |
| 2  | 9 16  | 10 27 | 11 39 | 12 51 | 14 4  | 15 19 | 16 35 |      |
| 1  | 9 7   | 10 17 | 11 29 | 12 40 | 13 52 | 15 5  | 16 20 |      |
| 0  | 8 59  | 10 8  | 11 18 | 12 28 | 13 39 | 14 51 | 16 5  |      |

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# Tabula Positionum

| Elevatio | 1   | 2    | 3    | 4    | 5    | 6    | 7    |
|----------|-----|------|------|------|------|------|------|
| S        | S m | S m  | S m  | S m  | S m  | S m  | S m  |
| 0        | 1 7 | 2 13 | 3 20 | 4 27 | 5 35 | 6 42 | 7 50 |
| 1        | 1 6 | 2 11 | 3 17 | 4 23 | 5 30 | 6 36 | 7 43 |
| De       | 2   | 2 9  | 3 14 | 4 19 | 5 25 | 6 29 | 7 35 |
| cli      | 3   | 2 7  | 3 11 | 4 14 | 5 19 | 6 23 | 7 28 |
| na       | 4   | 2 5  | 3 7  | 4 10 | 5 14 | 6 17 | 7 20 |
| tio      | 5   | 2 3  | 3 4  | 4 6  | 5 9  | 6 10 | 7 13 |
| Me       | 6   | 2 0  | 3 1  | 4 2  | 5 3  | 6 4  | 7 6  |
| ri       | 7   | 1 58 | 2 58 | 3 57 | 4 58 | 5 58 | 6 58 |
| di       | 8   | 0 59 | 1 55 | 2 55 | 3 53 | 4 53 | 5 51 |
| ana      | 9   | 0 58 | 1 54 | 2 51 | 3 49 | 4 47 | 5 45 |
| fu       | 10  | 0 56 | 1 52 | 2 48 | 3 45 | 4 43 | 5 38 |
| pra      | 11  | 0 55 | 1 50 | 2 45 | 3 40 | 4 37 | 5 32 |
| ter      | 12  | 0 54 | 1 48 | 2 42 | 3 36 | 4 31 | 5 25 |
| ram      | 13  | 0 53 | 1 45 | 2 38 | 3 31 | 4 26 | 5 19 |
|          | 14  | 0 52 | 1 43 | 2 35 | 3 27 | 4 20 | 5 12 |
| Et       | 15  | 0 51 | 1 41 | 2 32 | 3 23 | 4 14 | 5 5  |
|          | 16  | 0 50 | 1 39 | 2 28 | 3 18 | 4 9  | 5 49 |
| Se       | 17  | 0 49 | 1 36 | 2 25 | 3 13 | 4 3  | 5 41 |
| pten     | 18  | 0 48 | 1 34 | 2 21 | 3 9  | 4 45 | 5 33 |
| trio     | 19  | 0 46 | 1 32 | 2 18 | 3 4  | 4 38 | 5 25 |
| na       | 20  | 0 45 | 1 29 | 2 14 | 3 0  | 4 30 | 5 16 |
| lis      | 21  | 0 44 | 1 27 | 2 11 | 2 55 | 4 23 | 5 8  |
| sub      | 22  | 0 43 | 1 24 | 2 7  | 2 50 | 4 16 | 4 59 |
| ter      | 23  | 0 42 | 1 22 | 2 3  | 2 45 | 4 9  | 4 51 |
| ra       | 24  | 0 40 | 1 20 | 2 0  | 2 40 | 4 1  | 4 42 |
|          | 25  | 0 39 | 1 17 | 1 56 | 2 35 | 3 53 | 4 33 |
|          | 26  | 0 38 | 1 14 | 1 52 | 2 30 | 3 46 | 4 24 |
|          | 27  | 0 36 | 1 12 | 1 48 | 2 24 | 3 38 | 4 15 |
|          | 28  | 0 35 | 1 9  | 1 44 | 2 19 | 3 30 | 4 5  |
|          | 29  | 0 34 | 1 6  | 1 40 | 2 14 | 3 22 | 3 56 |
|          | 30  | 0 32 | 1 4  | 1 36 | 2 8  | 3 13 | 3 46 |
|          | 31  | 0 31 | 1 1  | 1 32 | 2 3  | 3 5  | 3 36 |
|          | 32  | 0 30 | 0 58 | 1 27 | 1 57 | 2 27 | 3 26 |



# Ad .42. Gradus Latitudinis

|     | 8    | 9    | 10    | 11    | 12    | 13    | 14 Poli |
|-----|------|------|-------|-------|-------|-------|---------|
| 5 m | 5 m  | 5 m  | 5 m   | 5 m   | 5 m   | 5 m   | 5 m     |
| 0   | 8 59 | 10 8 | 11 18 | 12 28 | 13 39 | 14 51 | 16 5    |
| 1   | 8 51 | 9 59 | 11 7  | 12 16 | 13 26 | 14 37 | 15 50   |
| 2   | 8 42 | 9 49 | 10 57 | 12 5  | 13 14 | 14 23 | 15 35   |
| 3   | 8 34 | 9 39 | 10 46 | 11 53 | 13 1  | 14 9  | 15 20   |
| 4   | 8 25 | 9 30 | 10 36 | 11 41 | 12 48 | 13 55 | 15 5    |
| 5   | 8 17 | 9 20 | 10 25 | 11 30 | 12 35 | 13 42 | 14 50   |
| 6   | 8 8  | 9 11 | 10 14 | 11 18 | 12 22 | 13 28 | 14 35   |
| 7   | 8 0  | 9 1  | 10 4  | 11 6  | 12 9  | 13 14 | 14 20   |
| 8   | 7 51 | 8 52 | 9 53  | 10 54 | 11 56 | 12 59 | 14 5    |
| 9   | 7 43 | 8 42 | 9 42  | 10 42 | 11 43 | 12 45 | 13 49   |
| 10  | 7 34 | 8 32 | 9 31  | 10 30 | 11 30 | 12 31 | 13 34   |
| 11  | 7 25 | 8 22 | 9 20  | 10 18 | 11 17 | 12 17 | 13 18   |
| 12  | 7 16 | 8 12 | 9 9   | 10 6  | 11 4  | 12 2  | 13 3    |
| 13  | 7 7  | 8 2  | 8 58  | 10 54 | 10 50 | 11 48 | 12 47   |
| 14  | 6 59 | 7 52 | 8 47  | 9 41  | 10 37 | 11 33 | 12 31   |
| 15  | 6 49 | 7 42 | 8 36  | 9 29  | 10 23 | 11 18 | 12 15   |
| 16  | 6 40 | 7 32 | 8 24  | 9 16  | 10 9  | 11 3  | 11 59   |
| 17  | 6 31 | 7 21 | 8 13  | 9 4   | 9 55  | 10 48 | 11 43   |
| 18  | 6 22 | 7 11 | 8 1   | 8 51  | 9 41  | 10 33 | 11 26   |
| 19  | 6 13 | 7 0  | 7 49  | 8 38  | 9 27  | 10 17 | 11 10   |
| 20  | 6 3  | 6 50 | 7 37  | 8 25  | 9 13  | 10 2  | 10 53   |
| 21  | 5 53 | 6 39 | 7 25  | 8 11  | 8 58  | 9 46  | 10 35   |
| 22  | 5 44 | 6 28 | 7 13  | 7 58  | 8 43  | 9 30  | 10 18   |
| 23  | 5 34 | 6 17 | 7 0   | 7 44  | 8 28  | 9 14  | 10 0    |
| 24  | 5 24 | 6 5  | 6 48  | 7 30  | 8 13  | 8 57  | 9 43    |
| 25  | 5 14 | 5 54 | 6 35  | 7 16  | 7 58  | 8 40  | 9 24    |
| 26  | 5 3  | 5 42 | 6 22  | 7 2   | 7 42  | 8 23  | 9 6     |
| 27  | 4 53 | 5 30 | 6 9   | 6 47  | 7 26  | 8 6   | 8 47    |
| 28  | 4 42 | 5 18 | 5 55  | 6 32  | 7 10  | 7 48  | 8 28    |
| 29  | 4 31 | 5 6  | 5 41  | 6 17  | 6 53  | 7 30  | 8 8     |
| 30  | 4 20 | 4 53 | 5 27  | 6 1   | 6 36  | 7 11  | 8 48    |
| 31  | 4 8  | 4 40 | 5 13  | 5 46  | 6 19  | 6 53  | 7 28    |
| 32  | 3 57 | 4 27 | 4 58  | 5 29  | 6 1   | 6 33  | 7 7     |

2 m 2



Residuum Tabule Positionum

| Elenatio | 15    | 16    | 17    | 18    | 19    | 20    | 21    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32       | 26 57 | 28 53 | 30 52 | 32 52 | 34 54 | 37 0  | 39 7  |
| 31       | 26 35 | 28 29 | 30 26 | 32 25 | 34 25 | 36 29 | 38 34 |
| De       | 30    | 26 13 | 28 6  | 30 1  | 31 58 | 33 57 | 35 59 |
| cli      | 29    | 25 51 | 27 43 | 29 36 | 31 32 | 33 29 | 35 29 |
| na       | 28    | 25 30 | 27 20 | 29 12 | 31 6  | 33 2  | 35 0  |
| tio      | 27    | 25 10 | 26 58 | 28 46 | 30 41 | 32 35 | 34 32 |
| Se       | 26    | 24 50 | 26 36 | 28 26 | 30 16 | 32 9  | 34 5  |
| pten     | 25    | 24 30 | 26 15 | 28 3  | 29 52 | 31 43 | 33 37 |
| rio      | 24    | 24 10 | 25 54 | 27 40 | 29 28 | 31 18 | 33 0  |
| na       | 23    | 23 51 | 25 33 | 27 18 | 29 5  | 30 53 | 32 44 |
| lis      | 22    | 23 32 | 25 13 | 26 57 | 28 42 | 30 29 | 32 18 |
| su       | 21    | 23 13 | 24 53 | 26 35 | 28 19 | 30 5  | 31 53 |
| pra      | 20    | 22 55 | 24 33 | 26 14 | 27 56 | 29 41 | 31 28 |
| ter      | 19    | 22 37 | 24 14 | 25 54 | 27 34 | 29 18 | 31 3  |
| ram      | 18    | 22 19 | 23 55 | 25 33 | 27 13 | 28 54 | 30 38 |
|          | 17    | 22 1  | 23 36 | 25 13 | 26 51 | 28 31 | 30 14 |
| Et       | 16    | 21 43 | 23 17 | 24 53 | 26 30 | 28 9  | 29 50 |
| De       | 15    | 21 26 | 22 58 | 24 33 | 26 9  | 27 47 | 29 27 |
| ri       | 14    | 21 9  | 22 40 | 24 13 | 25 48 | 27 24 | 29 3  |
| di       | 13    | 20 52 | 22 22 | 23 54 | 25 27 | 27 3  | 28 40 |
| ana      | 12    | 20 35 | 22 4  | 23 35 | 25 7  | 26 41 | 28 17 |
| sub      | 11    | 20 18 | 21 46 | 23 15 | 24 46 | 26 19 | 27 54 |
| ter      | 10    | 20 1  | 21 28 | 22 56 | 24 26 | 25 58 | 27 32 |
| ra       | 9     | 19 45 | 21 10 | 22 38 | 24 6  | 25 37 | 27 9  |
|          | 8     | 19 28 | 20 53 | 22 19 | 23 46 | 25 15 | 26 47 |
|          | 7     | 19 12 | 20 35 | 22 0  | 23 26 | 24 54 | 26 25 |
|          | 6     | 18 56 | 20 18 | 21 41 | 23 6  | 24 33 | 26 3  |
|          | 5     | 18 40 | 20 0  | 21 23 | 22 47 | 24 13 | 25 40 |
|          | 4     | 18 23 | 19 43 | 21 5  | 22 27 | 23 52 | 25 18 |
|          | 3     | 18 7  | 19 26 | 20 46 | 22 8  | 23 31 | 24 57 |
|          | 2     | 17 51 | 19 8  | 20 28 | 21 48 | 23 10 | 24 35 |
|          | 1     | 17 35 | 18 51 | 20 9  | 21 28 | 22 50 | 24 13 |
|          | 0     | 17 19 | 18 34 | 19 51 | 21 9  | 22 29 | 23 51 |
|          |       |       |       |       |       |       | 25 14 |



# Ad .42. Gradus Latitudinis

|    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |      |
| 32 | 41 17 | 43 31 | 45 47 | 48 7  | 50 33 | 53 2  | 55 36 |      |
| 31 | 40 43 | 42 55 | 45 9  | 47 27 | 49 50 | 52 18 | 54 50 |      |
| 30 | 40 9  | 42 19 | 44 32 | 46 48 | 49 9  | 51 34 | 54 5  |      |
| 29 | 39 36 | 41 45 | 43 55 | 46 10 | 48 29 | 50 52 | 53 20 |      |
| 28 | 39 4  | 41 11 | 43 20 | 45 32 | 47 50 | 50 11 | 52 37 |      |
| 27 | 38 33 | 40 37 | 42 45 | 44 56 | 47 11 | 49 31 | 51 55 |      |
| 26 | 38 2  | 40 5  | 42 11 | 44 20 | 46 34 | 48 51 | 51 14 |      |
| 25 | 37 32 | 39 33 | 41 37 | 43 45 | 45 57 | 48 13 | 50 33 |      |
| 24 | 37 2  | 39 2  | 41 4  | 43 10 | 45 21 | 47 35 | 49 54 |      |
| 23 | 36 33 | 38 31 | 40 32 | 42 36 | 44 45 | 46 57 | 49 15 |      |
| 22 | 36 4  | 38 1  | 40 0  | 42 3  | 44 10 | 46 21 | 48 36 |      |
| 21 | 35 35 | 37 31 | 39 28 | 41 30 | 43 35 | 45 45 | 47 58 |      |
| 20 | 35 7  | 37 1  | 38 57 | 40 57 | 43 2  | 45 9  | 47 21 |      |
| 19 | 34 40 | 36 32 | 38 27 | 40 25 | 42 28 | 44 34 | 46 45 |      |
| 18 | 34 13 | 36 4  | 37 57 | 39 54 | 41 55 | 44 0  | 46 9  |      |
| 17 | 33 46 | 35 35 | 37 27 | 39 23 | 41 23 | 43 26 | 45 33 |      |
| 16 | 33 19 | 35 7  | 36 58 | 38 52 | 40 51 | 42 52 | 44 58 |      |
| 15 | 32 53 | 34 40 | 36 29 | 38 22 | 40 19 | 42 19 | 44 23 |      |
| 14 | 32 27 | 34 13 | 36 0  | 37 52 | 39 47 | 41 46 | 43 49 |      |
| 13 | 32 1  | 33 46 | 35 32 | 37 22 | 39 16 | 41 13 | 43 15 |      |
| 12 | 31 36 | 33 19 | 35 4  | 36 52 | 38 45 | 40 41 | 42 41 |      |
| 11 | 31 10 | 32 52 | 34 36 | 36 23 | 38 14 | 40 9  | 42 8  |      |
| 10 | 30 45 | 32 26 | 34 8  | 35 54 | 37 44 | 39 37 | 41 35 |      |
| 9  | 30 20 | 31 59 | 33 41 | 35 25 | 37 14 | 39 6  | 41 2  |      |
| 8  | 29 55 | 31 33 | 33 13 | 34 56 | 36 44 | 38 34 | 40 29 |      |
| 7  | 29 31 | 31 7  | 32 46 | 34 28 | 36 14 | 38 3  | 39 57 |      |
| 6  | 29 6  | 30 41 | 32 19 | 34 0  | 35 44 | 37 32 | 39 24 |      |
| 5  | 28 42 | 30 16 | 31 52 | 33 31 | 35 15 | 37 1  | 38 52 |      |
| 4  | 28 17 | 29 50 | 31 25 | 33 3  | 34 45 | 36 31 | 38 20 |      |
| 3  | 27 53 | 29 25 | 30 58 | 32 35 | 34 16 | 36 0  | 37 48 |      |
| 2  | 27 29 | 28 59 | 30 31 | 32 7  | 33 47 | 35 29 | 37 16 |      |
| 1  | 27 4  | 28 33 | 30 5  | 31 39 | 33 17 | 34 59 | 36 44 |      |
| 0  | 26 40 | 28 8  | 29 38 | 31 11 | 32 48 | 34 28 | 36 12 |      |

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# Residuum Tabule Positionum

| Ele ato | 15    | 16    | 17    | 18    | 19    | 20    | 21    |
|---------|-------|-------|-------|-------|-------|-------|-------|
| B       | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 0       | 17 19 | 18 34 | 19 51 | 21 9  | 22 29 | 23 51 | 25 14 |
| 1       | 17 3  | 18 17 | 19 33 | 20 50 | 22 8  | 23 29 | 24 51 |
| De      | 2     | 16 47 | 18 0  | 19 14 | 20 30 | 21 48 | 23 7  |
| ci      | 3     | 16 31 | 17 42 | 18 56 | 20 10 | 21 27 | 22 45 |
| na      | 4     | 16 15 | 17 25 | 18 37 | 19 51 | 21 6  | 22 24 |
| tio     | 5     | 15 58 | 17 8  | 18 19 | 19 31 | 20 45 | 22 2  |
| De      | 6     | 15 42 | 16 50 | 18 1  | 19 12 | 20 25 | 21 39 |
| ri      | 7     | 15 26 | 16 33 | 17 42 | 18 52 | 20 4  | 21 17 |
| di      | 8     | 15 10 | 16 15 | 17 23 | 18 32 | 19 43 | 20 55 |
| ana     | 9     | 14 53 | 15 58 | 17 4  | 18 12 | 19 21 | 20 33 |
| fu      | 10    | 14 37 | 15 40 | 16 46 | 17 52 | 19 0  | 20 10 |
| pra     | 11    | 14 20 | 15 22 | 16 27 | 17 32 | 18 39 | 19 48 |
| ter     | 12    | 14 3  | 14 4  | 16 7  | 17 11 | 18 17 | 19 25 |
| ram     | 13    | 13 46 | 14 46 | 15 48 | 16 51 | 17 55 | 19 2  |
|         | 14    | 13 29 | 14 28 | 15 29 | 16 30 | 17 34 | 18 39 |
| Et      | 15    | 13 12 | 14 10 | 15 9  | 16 9  | 17 11 | 18 15 |
| Se      | 16    | 12 55 | 13 51 | 14 49 | 15 48 | 16 49 | 17 52 |
| pen     | 17    | 12 37 | 13 32 | 14 29 | 15 27 | 16 27 | 17 28 |
| tio     | 18    | 12 19 | 13 13 | 14 9  | 15 5  | 16 4  | 17 4  |
| na      | 19    | 12 1  | 12 54 | 13 48 | 14 44 | 15 40 | 16 39 |
| Is      | 20    | 11 43 | 12 35 | 13 28 | 14 22 | 15 17 | 16 14 |
| sub     | 21    | 11 25 | 12 15 | 13 7  | 13 59 | 14 53 | 15 49 |
| ter     | 22    | 11 6  | 11 55 | 12 45 | 13 36 | 14 29 | 15 24 |
| ra      | 23    | 10 47 | 11 35 | 12 22 | 13 13 | 14 5  | 14 58 |
|         | 24    | 10 28 | 11 14 | 12 2  | 12 50 | 13 40 | 14 32 |
|         | 25    | 10 8  | 10 53 | 11 39 | 12 26 | 13 15 | 14 5  |
|         | 26    | 9 48  | 10 32 | 11 16 | 12 2  | 12 49 | 13 37 |
|         | 27    | 9 28  | 10 10 | 10 53 | 11 37 | 12 23 | 13 10 |
|         | 28    | 9 8   | 9 48  | 10 30 | 11 12 | 11 56 | 12 42 |
|         | 29    | 8 47  | 9 25  | 10 6  | 10 46 | 11 29 | 12 13 |
|         | 30    | 8 25  | 9 2   | 9 41  | 10 20 | 11 1  | 11 43 |
|         | 31    | 8 3   | 8 39  | 9 16  | 9 53  | 10 33 | 11 13 |
|         | 32    | 7 4   | 8 15  | 8 50  | 9 26  | 10 2  | 10 42 |



Ad .42. Gradus Latitudinis

|    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |      |
| 0  | 26 40 | 28 8  | 29 38 | 31 11 | 32 48 | 34 28 | 36 12 |      |
| 1  | 26 16 | 27 43 | 29 11 | 30 43 | 32 19 | 33 57 | 35 40 |      |
| 2  | 25 51 | 27 17 | 28 45 | 30 15 | 31 49 | 33 27 | 35 8  |      |
| 3  | 25 27 | 26 51 | 28 18 | 29 47 | 31 20 | 32 56 | 34 36 |      |
| 4  | 25 3  | 26 26 | 27 51 | 29 19 | 30 51 | 32 25 | 34 4  |      |
| 5  | 24 38 | 26 0  | 27 24 | 28 51 | 30 21 | 31 55 | 33 32 |      |
| 6  | 24 14 | 25 35 | 26 57 | 28 22 | 29 52 | 31 24 | 33 0  |      |
| 7  | 23 49 | 25 9  | 26 30 | 27 54 | 29 22 | 30 53 | 32 27 |      |
| 8  | 23 25 | 24 43 | 26 3  | 27 26 | 28 52 | 30 22 | 31 55 |      |
| 9  | 23 0  | 24 17 | 25 35 | 26 57 | 28 22 | 29 50 | 31 22 |      |
| 10 | 22 35 | 23 50 | 25 8  | 26 28 | 27 52 | 29 19 | 30 49 |      |
| 11 | 22 10 | 23 24 | 24 40 | 25 59 | 27 22 | 28 47 | 30 16 |      |
| 12 | 21 44 | 23 57 | 24 12 | 25 30 | 26 51 | 28 15 | 29 43 |      |
| 13 | 21 19 | 22 30 | 23 44 | 25 0  | 26 20 | 27 43 | 29 9  |      |
| 14 | 20 53 | 22 3  | 23 16 | 24 30 | 25 49 | 27 10 | 28 35 |      |
| 15 | 20 27 | 21 36 | 22 47 | 24 0  | 25 17 | 26 37 | 28 1  |      |
| 16 | 20 1  | 21 9  | 22 18 | 23 30 | 24 45 | 26 4  | 27 26 |      |
| 17 | 19 34 | 20 41 | 21 49 | 22 59 | 24 13 | 25 30 | 26 51 |      |
| 18 | 19 7  | 20 12 | 21 19 | 22 28 | 23 41 | 24 56 | 26 15 |      |
| 19 | 18 40 | 19 44 | 20 49 | 21 57 | 23 8  | 24 22 | 25 39 |      |
| 20 | 18 13 | 19 15 | 20 19 | 21 25 | 22 34 | 23 47 | 25 3  |      |
| 21 | 17 45 | 18 45 | 19 48 | 20 52 | 22 1  | 23 11 | 24 26 |      |
| 22 | 17 16 | 18 15 | 19 16 | 20 19 | 21 26 | 22 35 | 23 48 |      |
| 23 | 16 47 | 17 45 | 18 44 | 19 46 | 20 51 | 21 59 | 23 9  |      |
| 24 | 16 18 | 17 14 | 18 12 | 19 12 | 20 15 | 21 21 | 22 30 |      |
| 25 | 15 48 | 16 43 | 17 39 | 18 37 | 19 39 | 20 43 | 21 51 |      |
| 26 | 15 18 | 16 11 | 17 5  | 18 2  | 19 2  | 20 5  | 21 10 |      |
| 27 | 14 47 | 15 41 | 16 31 | 17 26 | 18 25 | 19 23 | 20 29 |      |
| 28 | 14 16 | 15 5  | 15 56 | 16 50 | 17 46 | 18 45 | 19 47 |      |
| 29 | 13 44 | 14 31 | 15 21 | 16 12 | 17 7  | 18 4  | 19 4  |      |
| 30 | 13 11 | 13 57 | 14 44 | 15 34 | 16 27 | 17 22 | 18 19 |      |
| 31 | 12 37 | 13 21 | 14 7  | 14 55 | 15 46 | 16 38 | 17 34 |      |
| 32 | 12 3  | 12 45 | 13 29 | 14 15 | 15 3  | 15 54 | 16 48 |      |

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# Residuum Tabule Positionum

| Elenatio | 29    | 30    | 31    | 32    | 33    | 34    | 35    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32       | 58 16 | 61 2  | 63 55 | 66 58 | 70 5  | 73 27 | 77 0  |
| 31       | 57 27 | 60 11 | 63 2  | 66 0  | 69 7  | 72 26 | 75 56 |
| De       | 30    | 56 40 | 59 21 | 62 10 | 65 6  | 68 10 | 71 26 |
| cli      | 29    | 55 54 | 58 33 | 61 19 | 64 13 | 67 15 | 70 28 |
| na       | 28    | 55 8  | 57 46 | 60 30 | 63 21 | 66 21 | 69 32 |
| tio      | 27    | 54 24 | 56 59 | 59 42 | 62 31 | 65 25 | 68 37 |
| De       | 26    | 53 41 | 56 14 | 58 54 | 61 42 | 64 37 | 67 43 |
| pten     | 25    | 52 59 | 55 30 | 58 8  | 60 53 | 63 47 | 66 51 |
| trio     | 24    | 52 17 | 54 47 | 57 23 | 60 6  | 62 57 | 66 0  |
| na       | 23    | 51 37 | 54 4  | 56 39 | 59 20 | 62 9  | 65 9  |
| lis      | 22    | 50 56 | 53 22 | 55 55 | 58 34 | 61 22 | 64 20 |
| fu       | 21    | 50 17 | 52 41 | 55 12 | 57 50 | 60 35 | 63 31 |
| pra      | 20    | 49 38 | 52 1  | 54 30 | 57 6  | 59 49 | 62 44 |
| ter      | 19    | 49 0  | 51 21 | 53 48 | 56 22 | 59 4  | 61 57 |
| ram      | 18    | 48 23 | 50 42 | 53 8  | 55 40 | 58 20 | 61 11 |
|          | 17    | 47 45 | 50 3  | 52 27 | 54 58 | 57 36 | 60 25 |
| Et       | 16    | 47 8  | 49 25 | 51 47 | 54 16 | 56 53 | 59 40 |
| De       | 15    | 46 32 | 48 47 | 51 8  | 53 35 | 56 10 | 58 56 |
| ri       | 14    | 45 56 | 48 10 | 50 29 | 52 55 | 55 28 | 58 12 |
| di       | 13    | 45 21 | 47 33 | 49 50 | 52 15 | 54 46 | 57 29 |
| ana      | 12    | 44 46 | 46 56 | 49 12 | 51 35 | 54 5  | 56 46 |
| sub      | 11    | 44 11 | 46 20 | 48 34 | 50 56 | 53 24 | 56 3  |
| ter      | 10    | 43 37 | 45 44 | 47 57 | 50 17 | 52 44 | 55 21 |
| ra       | 9     | 43 2  | 45 8  | 47 20 | 49 38 | 52 3  | 54 36 |
|          | 8     | 42 28 | 44 32 | 46 43 | 48 59 | 51 23 | 53 57 |
|          | 7     | 41 55 | 43 57 | 46 6  | 48 11 | 50 33 | 53 16 |
|          | 6     | 41 20 | 43 22 | 45 29 | 47 43 | 50 4  | 52 35 |
|          | 5     | 40 47 | 42 47 | 44 53 | 47 5  | 49 24 | 51 54 |
|          | 4     | 40 13 | 42 12 | 44 16 | 46 27 | 48 45 | 51 13 |
|          | 3     | 39 40 | 41 37 | 43 40 | 45 50 | 48 7  | 50 35 |
|          | 2     | 39 7  | 41 2  | 43 4  | 45 12 | 47 27 | 49 52 |
|          | 1     | 38 33 | 40 28 | 42 28 | 44 34 | 46 48 | 49 11 |
|          | 0     | 38 0  | 39 53 | 41 52 | 43 57 | 46 9  | 48 31 |



# Ad .42. Gradus Latitudinis

|    | 36    | 37    | 38    | 39    | 40     | 41     | 42 Poli |
|----|-------|-------|-------|-------|--------|--------|---------|
| H  | H m   | H m   | H m   | H m   | H m    | H m    | H m     |
| 32 | 80 48 | 84 54 | 89 25 | 94 28 | 100 21 | 107 48 | 124 14  |
| 31 | 79 41 | 83 44 | 88 12 | 93 11 | 99 1   | 106 23 | 122 45  |
| 30 | 78 36 | 82 36 | 87 1  | 91 56 | 97 43  | 105 1  | 121 19  |
| 29 | 77 33 | 81 30 | 85 52 | 90 44 | 96 27  | 103 42 | 119 57  |
| 28 | 76 31 | 80 26 | 84 45 | 89 34 | 95 14  | 102 25 | 118 36  |
| 27 | 75 32 | 79 24 | 83 40 | 88 26 | 94 3   | 101 11 | 117 18  |
| 26 | 74 33 | 78 23 | 82 36 | 87 20 | 92 54  | 99 59  | 116 3   |
| 25 | 73 36 | 77 23 | 81 33 | 86 15 | 91 46  | 98 49  | 114 50  |
| 24 | 72 40 | 76 25 | 80 33 | 85 12 | 90 40  | 97 40  | 113 38  |
| 23 | 71 46 | 75 28 | 79 34 | 84 10 | 89 36  | 96 33  | 112 28  |
| 22 | 70 53 | 74 33 | 78 36 | 83 10 | 88 33  | 95 28  | 111 20  |
| 21 | 70 0  | 73 38 | 77 39 | 82 11 | 87 31  | 94 24  | 110 13  |
| 20 | 69 8  | 72 44 | 76 43 | 81 12 | 86 31  | 93 21  | 109 8   |
| 19 | 68 17 | 71 51 | 75 48 | 80 15 | 85 32  | 92 19  | 108 4   |
| 18 | 67 27 | 70 59 | 74 54 | 79 19 | 84 33  | 91 18  | 107 1   |
| 17 | 66 38 | 70 8  | 74 1  | 78 24 | 83 36  | 90 19  | 105 59  |
| 16 | 65 50 | 69 18 | 73 9  | 77 30 | 82 39  | 89 20  | 104 58  |
| 15 | 65 2  | 68 28 | 72 17 | 76 36 | 81 44  | 88 22  | 103 58  |
| 14 | 64 14 | 67 39 | 71 26 | 75 43 | 80 49  | 87 25  | 102 58  |
| 13 | 63 27 | 66 50 | 70 36 | 74 50 | 79 54  | 86 29  | 102 0   |
| 12 | 62 41 | 66 2  | 69 46 | 73 59 | 79 0   | 85 33  | 101 2   |
| 11 | 61 55 | 65 14 | 68 56 | 73 7  | 78 7   | 84 38  | 100 5   |
| 10 | 61 10 | 64 27 | 68 7  | 72 17 | 77 14  | 83 43  | 99 8    |
| 9  | 60 24 | 63 40 | 67 18 | 71 26 | 76 22  | 82 49  | 98 12   |
| 8  | 59 40 | 62 54 | 66 30 | 70 36 | 75 30  | 81 55  | 97 16   |
| 7  | 58 55 | 62 8  | 65 42 | 69 46 | 74 39  | 81 2   | 96 21   |
| 6  | 58 11 | 61 22 | 64 55 | 68 57 | 73 48  | 80 9   | 95 26   |
| 5  | 57 27 | 60 36 | 64 7  | 68 8  | 72 57  | 79 16  | 94 31   |
| 4  | 56 43 | 59 50 | 63 20 | 67 19 | 72 6   | 78 23  | 93 37   |
| 3  | 55 59 | 59 5  | 62 33 | 66 30 | 71 15  | 77 31  | 92 42   |
| 2  | 55 15 | 58 20 | 61 46 | 65 41 | 70 25  | 76 38  | 91 48   |
| 1  | 54 52 | 57 34 | 60 59 | 64 53 | 69 34  | 75 46  | 90 54   |
| 0  | 53 48 | 56 49 | 60 12 | 64 4  | 68 44  | 74 54  | 90 0    |



# Residuum Tabule Positionum

| Eleuano | 29    | 30    | 31    | 32    | 33    | 34    | 35    |
|---------|-------|-------|-------|-------|-------|-------|-------|
| B       | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 0       | 38 0  | 39 53 | 41 52 | 43 57 | 46 9  | 48 31 | 51 3  |
| 1       | 37 27 | 39 18 | 41 16 | 43 20 | 45 30 | 47 51 | 50 21 |
| De      | 2     | 36 53 | 38 44 | 40 40 | 42 42 | 44 51 | 47 10 |
| cli     | 3     | 36 20 | 38 9  | 40 4  | 42 4  | 44 12 | 46 29 |
| na      | 4     | 35 47 | 37 34 | 39 28 | 41 27 | 43 33 | 45 49 |
| cio     | 5     | 35 13 | 36 59 | 38 51 | 40 49 | 42 54 | 45 8  |
| De      | 6     | 34 40 | 36 24 | 38 15 | 40 11 | 42 14 | 44 27 |
| ri      | 7     | 34 5  | 35 46 | 37 38 | 39 43 | 41 35 | 43 46 |
| ci      | 8     | 33 32 | 35 14 | 37 1  | 38 55 | 40 55 | 43 5  |
| ana     | 9     | 32 58 | 34 38 | 36 24 | 38 16 | 40 15 | 42 23 |
| su      | 10    | 32 23 | 34 2  | 35 47 | 37 37 | 39 34 | 41 41 |
| pra     | 11    | 31 49 | 33 27 | 35 10 | 36 58 | 38 54 | 40 59 |
| ter     | 12    | 31 14 | 32 50 | 34 32 | 36 19 | 38 13 | 40 16 |
| ram     | 13    | 30 39 | 32 13 | 33 54 | 35 39 | 37 32 | 39 33 |
|         | 14    | 30 4  | 31 36 | 33 15 | 34 59 | 36 50 | 38 50 |
| Et      | 15    | 29 28 | 30 59 | 32 36 | 34 19 | 36 8  | 38 6  |
| Se      | 16    | 28 52 | 30 21 | 31 57 | 33 38 | 35 25 | 37 22 |
| pten    | 17    | 28 15 | 29 43 | 31 17 | 32 56 | 34 42 | 36 37 |
| trio    | 18    | 27 37 | 29 4  | 30 36 | 32 14 | 33 58 | 35 55 |
| na      | 19    | 27 0  | 28 25 | 29 56 | 31 32 | 33 14 | 35 5  |
| lis     | 20    | 26 22 | 27 45 | 29 14 | 30 48 | 32 29 | 34 18 |
| sub     | 21    | 25 43 | 27 5  | 28 32 | 30 4  | 31 43 | 33 31 |
| ter     | 22    | 25 4  | 26 24 | 27 49 | 29 20 | 30 56 | 32 42 |
| ra      | 23    | 24 23 | 25 42 | 27 5  | 28 34 | 30 9  | 31 53 |
|         | 24    | 23 43 | 24 59 | 26 21 | 27 48 | 29 21 | 31 2  |
|         | 25    | 23 1  | 24 16 | 25 36 | 27 1  | 28 31 | 30 11 |
|         | 26    | 22 19 | 23 32 | 24 50 | 26 12 | 27 41 | 29 19 |
|         | 27    | 21 36 | 22 47 | 24 2  | 25 23 | 26 50 | 28 25 |
|         | 28    | 20 52 | 22 0  | 23 14 | 24 33 | 25 57 | 27 30 |
|         | 29    | 20 6  | 21 13 | 22 25 | 23 41 | 25 3  | 26 34 |
|         | 30    | 19 20 | 20 25 | 21 34 | 22 48 | 24 8  | 25 36 |
|         | 31    | 18 33 | 19 35 | 20 42 | 21 54 | 23 11 | 24 36 |
|         | 32    | 17 44 | 18 44 | 19 49 | 20 58 | 22 13 | 23 35 |



Ad .42. gradus Latitudinis

|    | 36    | 37    | 38    | 39    | 40    | 41    | 42    | Poli |
|----|-------|-------|-------|-------|-------|-------|-------|------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |      |
| 0  | 53 48 | 56 49 | 60 12 | 64 4  | 68 4  | 74 54 | 90 0  |      |
| 1  | 53 4  | 56 4  | 59 25 | 63 15 | 67 54 | 74 2  | 89 6  |      |
| 2  | 52 21 | 55 18 | 58 38 | 62 27 | 67 3  | 73 10 | 88 12 |      |
| 3  | 51 37 | 54 33 | 57 51 | 61 38 | 66 13 | 72 17 | 87 18 |      |
| 4  | 50 53 | 53 48 | 57 4  | 60 49 | 65 22 | 71 25 | 86 23 |      |
| 5  | 50 9  | 53 2  | 56 18 | 60 0  | 64 31 | 70 32 | 85 29 |      |
| 6  | 49 25 | 52 16 | 55 29 | 59 11 | 63 40 | 69 39 | 84 34 |      |
| 7  | 48 41 | 51 30 | 54 42 | 58 22 | 62 49 | 68 46 | 83 39 |      |
| 8  | 47 56 | 50 44 | 53 54 | 57 32 | 61 58 | 67 53 | 82 44 |      |
| 9  | 47 12 | 49 58 | 53 6  | 56 42 | 61 6  | 66 59 | 81 48 |      |
| 10 | 46 26 | 49 11 | 52 17 | 55 51 | 60 14 | 66 5  | 80 52 |      |
| 11 | 45 41 | 48 24 | 51 28 | 55 1  | 59 21 | 65 10 | 79 55 |      |
| 12 | 44 55 | 47 36 | 50 38 | 54 9  | 58 28 | 64 15 | 78 58 |      |
| 13 | 44 9  | 46 48 | 49 48 | 53 18 | 57 34 | 63 19 | 78 0  |      |
| 14 | 43 22 | 45 59 | 48 58 | 52 25 | 56 39 | 62 23 | 77 2  |      |
| 15 | 42 34 | 45 10 | 48 7  | 51 32 | 55 44 | 61 26 | 76 2  |      |
| 16 | 41 46 | 44 20 | 47 15 | 50 38 | 54 49 | 60 28 | 75 2  |      |
| 17 | 40 58 | 43 30 | 46 23 | 49 44 | 53 52 | 59 29 | 74 1  |      |
| 18 | 40 9  | 42 39 | 45 30 | 48 49 | 52 55 | 58 30 | 72 59 |      |
| 19 | 39 19 | 41 47 | 44 36 | 47 53 | 51 56 | 57 29 | 71 56 |      |
| 20 | 38 28 | 40 54 | 43 41 | 46 56 | 50 57 | 56 27 | 70 52 |      |
| 21 | 37 36 | 40 0  | 42 45 | 45 57 | 49 57 | 55 24 | 69 47 |      |
| 22 | 36 43 | 39 5  | 41 48 | 44 58 | 48 55 | 54 20 | 68 40 |      |
| 23 | 35 50 | 38 10 | 40 50 | 43 58 | 47 52 | 53 15 | 67 32 |      |
| 24 | 34 56 | 37 13 | 39 5  | 42 56 | 46 48 | 52 8  | 66 22 |      |
| 25 | 34 0  | 36 15 | 38 51 | 41 53 | 45 42 | 50 59 | 65 10 |      |
| 26 | 33 3  | 35 15 | 37 48 | 40 48 | 44 34 | 49 49 | 63 57 |      |
| 27 | 32 4  | 34 14 | 36 44 | 39 42 | 43 25 | 48 37 | 62 42 |      |
| 28 | 31 5  | 33 12 | 35 39 | 38 34 | 42 14 | 47 23 | 61 24 |      |
| 29 | 30 3  | 32 8  | 34 32 | 37 24 | 41 1  | 46 6  | 60 3  |      |
| 30 | 29 0  | 31 2  | 33 23 | 36 12 | 39 45 | 44 47 | 56 41 |      |
| 31 | 27 55 | 29 54 | 32 12 | 34 57 | 38 27 | 43 25 | 57 15 |      |
| 32 | 26 48 | 28 44 | 30 59 | 33 40 | 37 7  | 42 0  | 55 46 |      |



# Tabula Positionum

| Elevatio | 1    | 2    | 3    | 4    | 5    | 6    | 7     |
|----------|------|------|------|------|------|------|-------|
| D        | D m  | D m  | D m  | D m  | D m  | D m  | D m   |
| 32       | 1 37 | 3 15 | 4 53 | 6 31 | 8 9  | 9 48 | 11 27 |
| 31       | 1 36 | 3 12 | 4 48 | 6 25 | 8 2  | 9 38 | 11 17 |
| De       | 1 35 | 3 9  | 4 44 | 6 20 | 7 55 | 9 31 | 11 7  |
| cl       | 1 33 | 3 7  | 4 40 | 6 14 | 7 48 | 9 22 | 10 57 |
| na       | 1 32 | 3 4  | 4 36 | 6 9  | 7 41 | 9 14 | 10 48 |
| rio      | 1 31 | 3 1  | 4 32 | 6 4  | 7 34 | 9 6  | 10 38 |
| Se       | 1 29 | 2 59 | 4 28 | 5 58 | 7 28 | 8 58 | 10 29 |
| pten     | 1 28 | 2 56 | 4 24 | 5 53 | 7 21 | 8 51 | 10 20 |
| rio      | 1 27 | 2 53 | 4 20 | 5 48 | 7 15 | 8 43 | 10 11 |
| na       | 1 25 | 2 51 | 4 17 | 5 43 | 7 9  | 8 35 | 10 2  |
| lis      | 1 24 | 2 49 | 4 13 | 5 38 | 7 3  | 8 28 | 9 54  |
| tu       | 1 23 | 2 46 | 4 9  | 5 33 | 6 56 | 8 21 | 9 47  |
| pra      | 1 22 | 2 44 | 4 6  | 5 28 | 6 50 | 8 14 | 9 37  |
| ter      | 1 21 | 2 41 | 4 2  | 5 24 | 6 45 | 8 6  | 9 28  |
| ram      | 1 19 | 2 39 | 3 59 | 5 19 | 6 39 | 7 59 | 9 20  |
| 17       | 1 18 | 2 37 | 3 55 | 5 15 | 6 33 | 7 52 | 9 12  |
| Et       | 1 17 | 2 34 | 3 52 | 5 10 | 6 27 | 7 46 | 9 4   |
| De       | 1 16 | 2 32 | 3 48 | 5 5  | 6 22 | 7 39 | 8 56  |
| ri       | 1 15 | 2 30 | 3 45 | 5 1  | 6 16 | 7 32 | 8 48  |
| di       | 1 14 | 2 28 | 3 42 | 4 57 | 6 10 | 7 25 | 8 40  |
| ana      | 1 13 | 2 25 | 3 38 | 4 52 | 6 5  | 7 19 | 8 33  |
| sub      | 1 12 | 2 23 | 3 35 | 4 48 | 5 59 | 7 12 | 8 25  |
| ter      | 1 11 | 2 21 | 3 32 | 4 43 | 5 54 | 7 6  | 8 17  |
| ra       | 1 9  | 2 19 | 3 29 | 4 39 | 5 49 | 6 59 | 8 10  |
| 8        | 1 8  | 2 17 | 3 25 | 4 35 | 5 43 | 6 53 | 8 2   |
| 7        | 1 7  | 2 15 | 3 22 | 4 31 | 5 38 | 6 46 | 7 55  |
| 6        | 1 6  | 2 13 | 3 19 | 4 26 | 5 32 | 6 40 | 7 47  |
| 5        | 1 5  | 2 10 | 3 16 | 4 22 | 5 27 | 6 34 | 7 40  |
| 4        | 1 4  | 2 8  | 3 13 | 4 18 | 5 22 | 6 27 | 7 33  |
| 3        | 1 3  | 2 6  | 3 9  | 4 14 | 5 17 | 6 21 | 7 25  |
| 2        | 1 2  | 2 4  | 3 6  | 4 9  | 5 11 | 6 15 | 7 18  |
| 1        | 1 1  | 2 2  | 3 3  | 4 5  | 5 6  | 6 8  | 7 10  |
| 0        | 1 0  | 2 0  | 3 0  | 4 1  | 5 1  | 6 2  | 7 3   |



Ad .45. Gradus Latitudinis

|    | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m     |
| 32 | 13 7  | 14 48 | 16 29 | 18 12 | 18 54 | 21 39 | 23 24 | 25 10   |
| 31 | 12 56 | 14 35 | 16 14 | 17 54 | 18 36 | 21 19 | 23 3  | 24 48   |
| 30 | 12 44 | 14 22 | 16 0  | 17 39 | 18 19 | 21 8  | 23 43 | 24 26   |
| 29 | 12 33 | 14 9  | 15 46 | 17 24 | 18 2  | 20 42 | 22 23 | 24 4    |
| 28 | 12 22 | 13 57 | 15 32 | 17 6  | 17 45 | 20 24 | 22 3  | 23 43   |
| 27 | 12 11 | 13 45 | 15 18 | 16 54 | 17 29 | 20 6  | 21 44 | 23 23   |
| 26 | 12 1  | 13 33 | 15 5  | 16 39 | 17 13 | 19 49 | 21 25 | 23 3    |
| 25 | 11 50 | 13 21 | 14 52 | 16 25 | 16 57 | 19 32 | 21 7  | 22 43   |
| 24 | 11 40 | 13 10 | 14 39 | 16 11 | 16 42 | 19 15 | 20 48 | 22 23   |
| 23 | 11 30 | 12 58 | 14 27 | 15 57 | 16 27 | 18 58 | 20 33 | 22 4    |
| 22 | 11 20 | 12 47 | 14 14 | 15 43 | 16 12 | 18 42 | 20 13 | 21 45   |
| 21 | 11 11 | 12 36 | 14 2  | 15 30 | 15 57 | 18 26 | 19 56 | 21 26   |
| 20 | 11 1  | 12 25 | 13 50 | 15 16 | 15 42 | 18 10 | 19 38 | 21 8    |
| 19 | 10 51 | 12 15 | 13 38 | 15 3  | 15 28 | 17 55 | 19 21 | 20 50   |
| 18 | 10 42 | 12 4  | 13 26 | 14 50 | 15 14 | 17 39 | 19 5  | 20 32   |
| 17 | 10 33 | 11 54 | 13 14 | 14 37 | 15 0  | 17 24 | 18 48 | 20 14   |
| 16 | 10 24 | 11 43 | 13 3  | 14 25 | 14 46 | 17 9  | 18 32 | 19 56   |
| 15 | 10 15 | 11 33 | 12 51 | 14 12 | 14 32 | 16 54 | 18 16 | 19 39   |
| 14 | 10 11 | 11 23 | 12 40 | 14 0  | 14 18 | 16 39 | 18 0  | 19 22   |
| 13 | 9 57  | 11 13 | 12 29 | 13 47 | 14 5  | 16 24 | 17 44 | 19 5    |
| 12 | 9 48  | 11 3  | 12 18 | 13 35 | 13 51 | 16 10 | 17 28 | 18 48   |
| 11 | 9 39  | 10 53 | 12 7  | 13 23 | 13 38 | 15 55 | 17 13 | 18 31   |
| 10 | 9 30  | 10 43 | 11 56 | 13 11 | 13 25 | 15 41 | 16 57 | 18 14   |
| 9  | 9 21  | 10 33 | 11 45 | 12 51 | 13 12 | 15 27 | 16 42 | 17 58   |
| 8  | 9 13  | 10 23 | 11 34 | 12 47 | 12 51 | 15 13 | 16 26 | 17 41   |
| 7  | 9 4   | 10 14 | 11 23 | 12 35 | 12 46 | 14 58 | 16 11 | 17 25   |
| 6  | 8 56  | 10 4  | 11 13 | 12 23 | 12 33 | 14 44 | 15 56 | 17 9    |
| 5  | 8 47  | 9 55  | 11 2  | 12 11 | 12 20 | 14 30 | 15 41 | 16 53   |
| 4  | 8 39  | 9 45  | 10 51 | 12 0  | 12 7  | 14 17 | 15 25 | 16 36   |
| 3  | 8 30  | 9 36  | 10 41 | 11 48 | 11 54 | 14 3  | 15 11 | 16 20   |
| 2  | 8 22  | 9 26  | 10 30 | 11 36 | 11 41 | 13 49 | 14 56 | 16 4    |
| 1  | 8 13  | 9 16  | 10 20 | 11 25 | 11 29 | 13 35 | 14 41 | 15 48   |
| 0  | 8 5   | 9 7   | 10 9  | 11 13 | 11 16 | 13 21 | 14 26 | 15 32   |



# Tabula Positionum

| Elevatio | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|----------|------|------|------|------|------|------|------|
| S        | S m  | S m  | S m  | S m  | S m  | S m  | S m  |
| 0        | 1 0  | 2 0  | 3 0  | 4 1  | 5 1  | 6 2  | 7 3  |
| 1        | 0 59 | 1 58 | 2 57 | 3 57 | 4 56 | 5 56 | 6 56 |
| De       | 2    | 0 58 | 1 56 | 2 54 | 3 53 | 4 51 | 5 49 |
| cli      | 3    | 0 57 | 1 54 | 2 51 | 3 48 | 4 45 | 5 41 |
| na       | 4    | 0 56 | 1 52 | 2 47 | 3 44 | 4 40 | 5 36 |
| cio      | 5    | 0 55 | 1 50 | 2 44 | 3 40 | 4 35 | 5 30 |
| De       | 6    | 0 54 | 1 47 | 2 41 | 3 36 | 4 29 | 5 24 |
| ri       | 7    | 0 53 | 1 45 | 2 38 | 3 31 | 4 24 | 5 18 |
| di       | 8    | 0 52 | 1 43 | 2 35 | 3 27 | 4 19 | 5 11 |
| ana      | 9    | 0 51 | 1 41 | 2 31 | 3 23 | 4 13 | 5 5  |
| fu       | 10   | 0 49 | 1 39 | 2 28 | 3 19 | 4 8  | 4 58 |
| pra      | 11   | 0 48 | 1 37 | 2 25 | 3 14 | 4 3  | 4 52 |
| ter      | 12   | 0 47 | 1 35 | 2 22 | 3 10 | 3 57 | 4 45 |
| ram      | 13   | 0 46 | 1 32 | 2 18 | 3 5  | 3 52 | 4 39 |
| Et       | 14   | 0 45 | 1 30 | 2 15 | 3 1  | 3 46 | 4 32 |
| Se       | 15   | 0 44 | 1 28 | 2 12 | 2 57 | 3 40 | 4 25 |
| pten     | 16   | 0 43 | 1 26 | 2 8  | 2 52 | 3 35 | 4 18 |
| 17       | 0 42 | 1 23 | 2 5  | 2 47 | 3 29 | 4 12 | 4 54 |
| trio     | 18   | 0 41 | 1 21 | 2 1  | 2 43 | 3 23 | 4 5  |
| na       | 19   | 0 39 | 1 19 | 1 58 | 2 38 | 3 17 | 3 58 |
| lis      | 20   | 0 38 | 1 16 | 1 54 | 2 34 | 3 12 | 3 50 |
| sub      | 21   | 0 37 | 1 14 | 1 51 | 2 29 | 3 6  | 3 43 |
| ter      | 22   | 0 36 | 1 11 | 1 47 | 2 24 | 2 59 | 3 36 |
| ra       | 23   | 0 35 | 1 9  | 1 43 | 2 19 | 2 53 | 3 28 |
| 24       | 0 33 | 1 7  | 1 40 | 2 14 | 2 47 | 3 21 | 3 55 |
| 25       | 0 32 | 1 4  | 1 36 | 2 9  | 2 41 | 3 13 | 3 46 |
| 26       | 0 31 | 1 1  | 1 32 | 2 4  | 2 34 | 3 6  | 3 37 |
| 27       | 0 29 | 0 59 | 1 28 | 1 58 | 2 28 | 2 58 | 3 28 |
| 28       | 0 28 | 0 56 | 1 24 | 1 53 | 2 21 | 2 50 | 3 18 |
| 29       | 0 27 | 0 53 | 1 20 | 1 48 | 2 14 | 2 42 | 3 9  |
| 30       | 0 25 | 0 51 | 1 16 | 1 42 | 2 7  | 2 33 | 2 59 |
| 31       | 0 24 | 0 48 | 1 12 | 1 37 | 2 0  | 2 25 | 2 49 |
| 32       | 0 23 | 0 45 | 1 7  | 1 31 | 1 53 | 2 16 | 2 39 |



Ad .45. gradus Latitudinis

|    | 8    | 9    | 10   | 11    | 12    | 13    | 14    | 15 poli |
|----|------|------|------|-------|-------|-------|-------|---------|
| B  | B m  | B m  | B m  | B m   | B m   | B m   | B m   | B m     |
| 0  | 8 5  | 9 7  | 10 9 | 11 13 | 12 16 | 13 21 | 14 26 | 15 32   |
| 1  | 7 57 | 9 58 | 9 58 | 11 1  | 12 3  | 13 7  | 14 11 | 15 16   |
| 2  | 7 48 | 8 48 | 9 48 | 10 50 | 11 51 | 12 53 | 13 56 | 15 0    |
| 3  | 7 40 | 8 38 | 9 37 | 10 38 | 11 38 | 12 39 | 13 41 | 14 44   |
| 4  | 7 31 | 8 29 | 9 27 | 10 26 | 11 25 | 12 25 | 13 26 | 14 28   |
| 5  | 7 23 | 8 19 | 9 16 | 10 15 | 11 12 | 12 12 | 13 11 | 14 11   |
| 6  | 7 14 | 8 10 | 9 5  | 10 3  | 10 59 | 11 58 | 12 56 | 13 55   |
| 7  | 7 6  | 8 0  | 8 55 | 9 51  | 10 46 | 11 44 | 12 41 | 13 39   |
| 8  | 6 57 | 7 51 | 8 44 | 9 39  | 10 33 | 11 29 | 12 26 | 13 23   |
| 9  | 6 49 | 7 41 | 8 33 | 9 27  | 10 20 | 11 15 | 12 10 | 13 6    |
| 10 | 6 40 | 7 31 | 8 22 | 9 15  | 10 7  | 11 1  | 11 55 | 12 50   |
| 11 | 6 31 | 7 21 | 8 11 | 9 3   | 9 54  | 10 47 | 11 39 | 12 33   |
| 12 | 6 22 | 7 11 | 8 0  | 8 51  | 9 41  | 10 32 | 11 24 | 12 16   |
| 13 | 6 13 | 7 1  | 7 49 | 8 39  | 9 27  | 10 19 | 11 8  | 11 59   |
| 14 | 6 5  | 6 51 | 7 38 | 8 26  | 9 14  | 10 3  | 10 52 | 11 42   |
| 15 | 5 55 | 6 41 | 7 27 | 8 14  | 9 0   | 9 48  | 10 36 | 11 25   |
| 16 | 5 46 | 6 31 | 7 15 | 8 1   | 8 46  | 9 33  | 10 20 | 11 8    |
| 17 | 5 37 | 6 20 | 7 4  | 7 49  | 8 32  | 9 18  | 10 4  | 10 50   |
| 18 | 5 28 | 6 10 | 7 52 | 7 36  | 8 18  | 9 3   | 9 47  | 10 32   |
| 19 | 5 19 | 5 59 | 6 40 | 7 23  | 8 4   | 8 47  | 9 31  | 10 14   |
| 20 | 5 9  | 5 49 | 6 28 | 7 10  | 7 50  | 8 32  | 9 14  | 9 56    |
| 21 | 4 59 | 5 38 | 6 16 | 6 56  | 7 35  | 8 16  | 8 56  | 9 38    |
| 22 | 4 50 | 5 27 | 6 01 | 6 43  | 7 20  | 8 0   | 8 39  | 9 19    |
| 23 | 4 40 | 5 16 | 5 4  | 6 29  | 7 5   | 7 44  | 8 21  | 9 0     |
| 24 | 4 30 | 5 4  | 5 39 | 6 15  | 6 50  | 7 27  | 8 4   | 8 41    |
| 25 | 4 20 | 4 53 | 5 26 | 6 1   | 6 35  | 7 10  | 7 45  | 8 21    |
| 26 | 4 9  | 4 41 | 5 13 | 5 47  | 6 19  | 6 53  | 7 27  | 8 1     |
| 27 | 3 59 | 4 29 | 5 0  | 5 32  | 6 3   | 6 36  | 7 8   | 7 41    |
| 28 | 3 48 | 4 17 | 4 46 | 5 17  | 5 47  | 6 18  | 6 49  | 7 21    |
| 29 | 3 37 | 4 5  | 4 32 | 5 2   | 5 30  | 6 0   | 6 29  | 7 0     |
| 30 | 3 26 | 3 52 | 4 18 | 4 46  | 5 13  | 5 41  | 6 9   | 6 38    |
| 31 | 3 14 | 3 39 | 4 4  | 4 31  | 4 56  | 5 23  | 5 49  | 6 16    |
| 32 | 3 3  | 3 26 | 3 49 | 4 14  | 4 38  | 5 3   | 5 28  | 5 54    |



# Residuum Tabule Positionum

| Elevatio | 16    | 17    | 18    | 19    | 20    | 21    | 22    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| S        | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 32       | 26 59 | 28 49 | 30 41 | 32 33 | 34 30 | 36 27 | 38 27 |
| 31       | 26 35 | 28 23 | 30 14 | 32 4  | 33 59 | 35 54 | 37 53 |
| De 30    | 26 12 | 27 58 | 29 47 | 31 36 | 33 29 | 35 22 | 37 19 |
| cl 29    | 25 49 | 27 33 | 29 21 | 31 8  | 32 59 | 34 51 | 36 46 |
| na 28    | 25 26 | 27 9  | 28 55 | 30 41 | 32 30 | 34 21 | 36 14 |
| tio 27   | 25 4  | 26 46 | 28 30 | 30 14 | 32 2  | 33 51 | 35 43 |
| Se 26    | 24 42 | 26 23 | 28 5  | 29 48 | 31 35 | 33 21 | 35 12 |
| pre 25   | 24 21 | 26 0  | 27 41 | 29 22 | 31 7  | 32 53 | 34 42 |
| trio 24  | 24 0  | 25 37 | 27 17 | 28 57 | 30 40 | 32 24 | 34 12 |
| na 23    | 23 39 | 25 15 | 26 54 | 28 32 | 30 14 | 31 56 | 33 43 |
| lis 22   | 23 19 | 24 54 | 26 31 | 28 8  | 29 48 | 31 29 | 33 14 |
| fu 21    | 22 59 | 24 32 | 26 8  | 27 44 | 29 23 | 31 2  | 32 45 |
| pra 20   | 22 39 | 24 11 | 25 45 | 27 20 | 28 58 | 30 36 | 32 17 |
| ter 19   | 22 20 | 23 52 | 25 23 | 26 57 | 28 33 | 30 10 | 31 50 |
| ram 18   | 22 1  | 23 30 | 25 2  | 26 32 | 28 8  | 29 44 | 31 23 |
| 17       | 21 42 | 23 10 | 24 40 | 26 10 | 27 44 | 29 18 | 30 56 |
| Et 16    | 21 23 | 22 50 | 24 19 | 25 48 | 27 20 | 28 53 | 30 29 |
| De 15    | 21 4  | 22 30 | 23 58 | 25 26 | 26 57 | 28 28 | 30 3  |
| ri 14    | 20 46 | 22 10 | 23 37 | 25 3  | 26 33 | 28 4  | 29 37 |
| di 13    | 20 28 | 21 51 | 23 16 | 24 42 | 26 10 | 27 39 | 29 11 |
| ana 12   | 20 10 | 21 32 | 22 56 | 24 20 | 25 47 | 27 15 | 28 46 |
| sub 11   | 19 52 | 21 12 | 22 35 | 23 58 | 25 24 | 26 51 | 28 20 |
| ter 10   | 19 34 | 20 53 | 22 15 | 23 37 | 25 2  | 26 27 | 27 55 |
| ra 9     | 19 16 | 20 35 | 21 55 | 23 16 | 24 39 | 26 3  | 27 30 |
| 8        | 18 59 | 20 16 | 21 35 | 22 54 | 24 17 | 25 40 | 27 5  |
| 7        | 18 41 | 19 57 | 21 15 | 22 33 | 23 55 | 25 16 | 26 41 |
| 6        | 18 24 | 19 38 | 20 55 | 22 12 | 23 33 | 24 53 | 26 16 |
| 5        | 18 6  | 19 20 | 20 38 | 21 52 | 23 10 | 24 26 | 25 52 |
| 4        | 17 49 | 19 2  | 20 16 | 21 31 | 22 38 | 24 6  | 25 27 |
| 3        | 17 32 | 18 43 | 19 57 | 21 10 | 22 27 | 23 43 | 25 3  |
| 2        | 17 14 | 18 25 | 19 37 | 20 49 | 22 5  | 23 20 | 24 39 |
| 1        | 16 57 | 18 6  | 19 17 | 20 29 | 21 43 | 22 57 | 24 14 |
| 0        | 16 40 | 17 48 | 18 58 | 20 8  | 21 21 | 22 34 | 23 50 |



Ad .45. Gradus Latitudinis

|    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m     |
| 32 | 40 30 | 42 35 | 44 44 | 46 56 | 49 12 | 51 31 | 53 56 | 55 25   |
| 31 | 39 54 | 41 57 | 44 4  | 46 13 | 48 28 | 50 45 | 53 7  | 55 34   |
| 30 | 39 18 | 41 20 | 43 25 | 45 32 | 47 44 | 50 0  | 52 20 | 54 44   |
| 29 | 38 44 | 40 43 | 42 47 | 44 52 | 47 2  | 49 15 | 51 34 | 53 56   |
| 28 | 38 10 | 40 8  | 42 9  | 44 13 | 46 21 | 48 32 | 50 48 | 53 9    |
| 27 | 37 36 | 39 33 | 41 33 | 43 34 | 45 41 | 47 50 | 50 4  | 52 22   |
| 26 | 37 4  | 38 59 | 40 57 | 42 57 | 45 1  | 47 9  | 49 21 | 51 37   |
| 25 | 36 32 | 38 25 | 40 22 | 42 20 | 44 23 | 46 28 | 48 39 | 50 53   |
| 24 | 36 1  | 37 52 | 39 47 | 41 44 | 43 45 | 45 49 | 47 57 | 50 10   |
| 23 | 35 30 | 37 20 | 39 13 | 41 8  | 43 7  | 45 10 | 47 17 | 49 27   |
| 22 | 35 0  | 36 48 | 38 40 | 40 33 | 42 31 | 44 31 | 46 36 | 48 45   |
| 21 | 34 30 | 36 16 | 38 7  | 39 58 | 41 55 | 43 53 | 45 57 | 48 4    |
| 20 | 34 0  | 35 45 | 37 34 | 39 25 | 41 19 | 43 16 | 45 18 | 47 24   |
| 19 | 33 31 | 35 15 | 37 2  | 38 51 | 40 44 | 42 40 | 44 40 | 46 44   |
| 18 | 33 3  | 34 45 | 36 31 | 38 18 | 40 10 | 42 4  | 44 3  | 46 5    |
| 17 | 32 34 | 34 15 | 36 0  | 37 46 | 39 36 | 41 28 | 43 25 | 45 26   |
| 16 | 32 6  | 33 46 | 35 29 | 37 14 | 39 2  | 40 53 | 42 48 | 44 48   |
| 15 | 31 39 | 33 17 | 34 59 | 36 42 | 38 29 | 40 18 | 42 12 | 44 10   |
| 14 | 31 12 | 32 48 | 34 29 | 36 10 | 37 56 | 39 44 | 41 36 | 43 33   |
| 13 | 30 45 | 32 20 | 33 59 | 35 39 | 37 23 | 39 10 | 41 1  | 42 56   |
| 12 | 30 18 | 31 52 | 33 29 | 35 8  | 36 51 | 38 36 | 40 26 | 42 19   |
| 11 | 29 51 | 31 24 | 33 0  | 34 37 | 36 19 | 38 3  | 39 51 | 41 43   |
| 10 | 29 25 | 30 56 | 32 31 | 34 7  | 35 47 | 37 30 | 39 17 | 41 7    |
| 9  | 28 58 | 30 29 | 32 2  | 33 37 | 35 16 | 36 57 | 38 42 | 40 31   |
| 8  | 28 32 | 30 1  | 31 33 | 33 7  | 34 44 | 36 24 | 38 8  | 39 55   |
| 7  | 28 6  | 29 34 | 31 5  | 32 37 | 34 13 | 35 52 | 37 54 | 39 20   |
| 6  | 27 40 | 29 7  | 30 37 | 32 7  | 33 42 | 35 19 | 37 0  | 38 45   |
| 5  | 27 15 | 28 40 | 30 8  | 31 38 | 33 11 | 34 47 | 36 27 | 38 10   |
| 4  | 26 49 | 28 13 | 29 40 | 31 8  | 32 41 | 34 15 | 35 53 | 37 35   |
| 3  | 26 24 | 27 46 | 29 12 | 30 39 | 32 10 | 33 43 | 35 20 | 37 0    |
| 2  | 25 58 | 27 19 | 28 44 | 30 10 | 31 39 | 33 11 | 34 47 | 36 25   |
| 1  | 25 32 | 26 53 | 28 16 | 29 40 | 31 9  | 32 39 | 34 13 | 35 51   |
| 0  | 25 7  | 26 26 | 27 48 | 29 11 | 30 38 | 32 7  | 33 40 | 35 16   |

» n i



# Residuum Tabule Positionum

| Elevatio | 16    | 17    | 18    | 19    | 20    | 21    | 22    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| S        | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 0        | 16 40 | 17 48 | 18 58 | 20 8  | 21 21 | 22 34 | 23 50 |
| 1        | 16 23 | 17 30 | 18 39 | 19 47 | 20 59 | 22 11 | 23 26 |
| De       | 2     | 16 6  | 17 11 | 18 19 | 19 27 | 20 37 | 21 48 |
| cli      | 3     | 15 48 | 16 53 | 17 59 | 19 6  | 20 15 | 21 25 |
| na       | 4     | 15 31 | 16 34 | 17 40 | 18 45 | 19 54 | 21 2  |
| tio      | 5     | 15 14 | 16 16 | 17 20 | 18 24 | 19 32 | 20 39 |
| De       | 6     | 14 56 | 15 58 | 17 1  | 18 4  | 19 9  | 20 15 |
| ri       | 7     | 14 39 | 15 39 | 16 41 | 17 43 | 18 47 | 19 52 |
| di       | 8     | 14 21 | 15 20 | 16 21 | 17 22 | 18 25 | 19 28 |
| ana      | 9     | 14 4  | 15 1  | 16 1  | 17 0  | 18 3  | 19 5  |
| fu       | 10    | 13 46 | 14 43 | 15 41 | 16 39 | 17 40 | 18 44 |
| pra      | 11    | 13 28 | 14 24 | 15 21 | 16 18 | 17 18 | 18 17 |
| ter      | 12    | 13 10 | 14 4  | 15 0  | 15 56 | 16 55 | 17 53 |
| ram      | 13    | 12 52 | 13 45 | 14 40 | 15 34 | 16 32 | 17 29 |
|          | 14    | 12 36 | 13 26 | 14 19 | 15 13 | 16 9  | 17 4  |
| Et       | 15    | 12 16 | 13 6  | 13 58 | 14 50 | 15 45 | 16 40 |
| Se       | 16    | 11 57 | 12 46 | 13 37 | 14 28 | 15 22 | 16 15 |
| pten     | 17    | 11 38 | 12 24 | 13 16 | 14 6  | 14 58 | 15 50 |
| trio     | 18    | 11 19 | 12 6  | 12 54 | 13 43 | 14 34 | 15 24 |
| na       | 19    | 11 0  | 11 45 | 12 33 | 13 19 | 14 9  | 14 58 |
| lis      | 20    | 10 41 | 11 25 | 12 11 | 12 56 | 13 44 | 14 32 |
| sub      | 21    | 10 21 | 11 4  | 11 48 | 12 32 | 13 19 | 14 6  |
| ter      | 22    | 10 1  | 10 42 | 11 25 | 12 8  | 12 54 | 13 39 |
| ra       | 23    | 9 41  | 10 21 | 11 2  | 11 44 | 12 28 | 13 12 |
|          | 24    | 9 20  | 9 59  | 10 39 | 11 19 | 12 2  | 12 44 |
|          | 25    | 8 59  | 9 36  | 10 15 | 10 54 | 11 35 | 12 15 |
|          | 26    | 8 36  | 9 13  | 9 51  | 10 28 | 11 7  | 11 47 |
|          | 27    | 8 16  | 8 50  | 9 26  | 10 2  | 10 40 | 11 17 |
|          | 28    | 7 54  | 8 27  | 9 1   | 9 35  | 10 12 | 10 47 |
|          | 29    | 7 31  | 8 3   | 8 35  | 9 8   | 9 43  | 10 17 |
|          | 30    | 7 8   | 7 38  | 8 9   | 8 40  | 9 13  | 9 46  |
|          | 31    | 6 45  | 7 13  | 7 42  | 8 12  | 8 43  | 9 14  |
|          | 32    | 6 21  | 6 47  | 7 15  | 7 43  | 8 13  | 8 41  |



Ad .45. Gradus Latitudinis

|    | 23    | 24    | 25    | 26    | 27    | 28    | 29    | 30 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m     |
| 0  | 25 7  | 26 26 | 27 48 | 29 11 | 30 38 | 32 7  | 33 4  | 35 16   |
| 1  | 24 42 | 25 59 | 27 20 | 28 42 | 30 7  | 31 35 | 33 7  | 34 41   |
| 2  | 24 16 | 25 33 | 26 52 | 28 12 | 29 38 | 31 3  | 32 33 | 34 7    |
| 3  | 23 50 | 25 6  | 26 24 | 27 43 | 29 6  | 30 31 | 32 0  | 33 32   |
| 4  | 23 25 | 24 39 | 25 56 | 27 14 | 28 35 | 29 59 | 31 27 | 32 57   |
| 5  | 22 55 | 24 12 | 25 28 | 26 44 | 28 5  | 29 27 | 30 53 | 32 22   |
| 6  | 22 34 | 23 45 | 24 59 | 26 15 | 27 34 | 28 55 | 30 20 | 31 47   |
| 7  | 22 8  | 23 18 | 24 31 | 25 45 | 27 3  | 28 22 | 29 46 | 31 12   |
| 8  | 21 42 | 22 51 | 24 3  | 25 15 | 26 32 | 27 50 | 29 12 | 30 37   |
| 9  | 21 16 | 22 23 | 23 34 | 24 45 | 26 0  | 27 17 | 28 38 | 30 1    |
| 10 | 20 49 | 21 56 | 23 5  | 24 15 | 25 29 | 26 44 | 28 3  | 29 25   |
| 11 | 20 23 | 21 28 | 22 36 | 23 45 | 24 57 | 26 11 | 27 29 | 28 49   |
| 12 | 19 56 | 21 0  | 22 7  | 23 14 | 24 25 | 25 38 | 26 54 | 28 13   |
| 13 | 19 29 | 20 32 | 21 37 | 22 43 | 23 53 | 25 4  | 26 19 | 27 36   |
| 14 | 19 2  | 20 4  | 21 7  | 22 12 | 23 20 | 24 30 | 25 44 | 26 59   |
| 15 | 18 35 | 19 35 | 20 37 | 21 40 | 22 47 | 23 56 | 25 8  | 26 32   |
| 16 | 18 8  | 19 6  | 20 7  | 21 8  | 22 14 | 23 21 | 24 32 | 25 44   |
| 17 | 17 40 | 18 37 | 19 36 | 20 36 | 21 40 | 22 46 | 23 55 | 25 6    |
| 18 | 17 11 | 18 7  | 19 5  | 20 4  | 21 6  | 22 10 | 23 17 | 24 27   |
| 19 | 16 43 | 17 37 | 18 34 | 19 30 | 20 32 | 21 24 | 22 40 | 23 48   |
| 20 | 16 14 | 17 7  | 18 2  | 18 57 | 19 57 | 20 58 | 22 2  | 23 8    |
| 21 | 15 44 | 16 36 | 17 29 | 18 24 | 19 21 | 20 21 | 21 23 | 22 28   |
| 22 | 15 14 | 16 4  | 16 56 | 17 49 | 18 45 | 19 43 | 20 44 | 21 47   |
| 23 | 14 44 | 15 32 | 16 23 | 17 14 | 18 9  | 19 4  | 20 3  | 21 5    |
| 24 | 14 13 | 15 0  | 15 49 | 16 38 | 17 31 | 18 25 | 19 23 | 20 22   |
| 25 | 13 42 | 14 27 | 15 14 | 16 2  | 16 53 | 17 46 | 18 41 | 19 39   |
| 26 | 13 10 | 13 53 | 14 39 | 15 25 | 16 15 | 17 5  | 17 59 | 18 55   |
| 27 | 12 38 | 13 19 | 14 3  | 14 48 | 15 35 | 16 24 | 17 16 | 18 10   |
| 28 | 12 4  | 12 44 | 13 27 | 14 9  | 14 55 | 15 42 | 16 32 | 17 23   |
| 29 | 11 30 | 12 9  | 12 49 | 13 30 | 14 14 | 14 59 | 15 46 | 16 36   |
| 30 | 10 56 | 11 32 | 12 11 | 12 50 | 13 32 | 14 14 | 15 0  | 15 48   |
| 31 | 10 20 | 10 55 | 11 32 | 12 9  | 12 48 | 13 29 | 14 13 | 14 58   |
| 32 | 9 44  | 10 17 | 10 52 | 11 26 | 12 4  | 12 43 | 13 24 | 14 7    |

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# Residuum Tabule Positionum

| Elevatio | 31    | 32    | 33    | 34    | 35    | 36    | 37    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| S        | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 32       | 58 59 | 61 39 | 64 26 | 67 21 | 70 24 | 73 36 | 76 59 |
| 31       | 58 6  | 60 43 | 63 28 | 66 20 | 69 20 | 72 24 | 75 49 |
| De       | 30    | 57 14 | 59 49 | 62 31 | 65 20 | 68 18 | 71 24 |
| cli      | 29    | 56 23 | 58 56 | 61 36 | 64 22 | 67 17 | 70 21 |
| na       | 28    | 55 34 | 58 4  | 60 42 | 63 26 | 66 18 | 69 19 |
| tio      | 27    | 54 46 | 57 14 | 59 49 | 62 31 | 65 21 | 68 20 |
| Se       | 26    | 53 58 | 56 26 | 58 58 | 61 37 | 64 25 | 67 21 |
| pten     | 25    | 53 12 | 55 36 | 58 8  | 60 45 | 63 30 | 66 24 |
| trio     | 24    | 52 27 | 54 49 | 57 18 | 59 54 | 62 37 | 65 28 |
| na       | 23    | 51 43 | 54 3  | 56 30 | 59 3  | 61 44 | 64 34 |
| lis      | 22    | 50 59 | 53 17 | 55 43 | 58 14 | 60 54 | 63 41 |
| su       | 21    | 50 16 | 52 33 | 54 56 | 57 25 | 60 3  | 62 48 |
| pra      | 20    | 49 34 | 51 49 | 53 10 | 56 38 | 59 13 | 61 56 |
| ter      | 19    | 48 52 | 51 5  | 53 25 | 55 51 | 58 24 | 61 5  |
| ram      | 18    | 48 12 | 50 23 | 52 41 | 55 5  | 57 36 | 60 15 |
|          | 17    | 47 31 | 49 41 | 51 57 | 54 19 | 56 49 | 59 26 |
| Et       | 16    | 46 51 | 48 59 | 51 14 | 53 34 | 56 2  | 58 38 |
| Me       | 15    | 46 12 | 48 18 | 50 31 | 52 50 | 55 16 | 57 50 |
| ri       | 14    | 45 33 | 47 38 | 49 49 | 52 6  | 54 30 | 57 2  |
| di       | 13    | 44 54 | 46 58 | 49 7  | 51 23 | 53 45 | 56 15 |
| ana      | 12    | 44 16 | 46 18 | 48 26 | 50 40 | 53 1  | 55 29 |
| sub      | 11    | 43 38 | 45 39 | 47 45 | 49 57 | 52 16 | 54 43 |
| ter      | 10    | 43 1  | 45 0  | 47 5  | 49 15 | 51 33 | 53 58 |
| ra       | 9     | 42 24 | 44 21 | 46 24 | 48 33 | 50 49 | 53 12 |
|          | 8     | 41 47 | 43 42 | 45 44 | 47 55 | 50 6  | 52 28 |
|          | 7     | 41 10 | 43 4  | 45 4  | 47 10 | 49 23 | 51 43 |
|          | 6     | 40 33 | 42 26 | 44 25 | 46 29 | 48 40 | 50 59 |
|          | 5     | 39 57 | 41 48 | 43 45 | 45 48 | 47 58 | 50 15 |
|          | 4     | 39 20 | 41 10 | 43 6  | 45 7  | 47 15 | 49 31 |
|          | 3     | 38 44 | 40 33 | 42 27 | 44 27 | 46 33 | 48 47 |
|          | 2     | 38 8  | 39 55 | 41 48 | 43 46 | 45 51 | 48 3  |
|          | 1     | 37 32 | 39 17 | 41 9  | 43 5  | 45 9  | 47 20 |
|          | 0     | 36 56 | 38 40 | 40 30 | 42 25 | 44 27 | 46 36 |



# Ad .45. Gradus Latitudinis

|    | 38    | 39    | 40    | 41    | 42    | 43     | 44     | 45 poli |
|----|-------|-------|-------|-------|-------|--------|--------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m    | B m    | B m     |
| 32 | 80 36 | 84 28 | 88 40 | 93 17 | 98 27 | 104 28 | 112 4  | 128 40  |
| 31 | 79 23 | 83 11 | 87 20 | 91 52 | 96 58 | 102 55 | 110 25 | 126 56  |
| 30 | 78 12 | 81 56 | 86 2  | 90 30 | 95 32 | 101 25 | 108 50 | 125 16  |
| 29 | 77 3  | 80 44 | 84 46 | 89 11 | 94 10 | 100 58 | 107 19 | 123 40  |
| 28 | 75 56 | 79 54 | 83 33 | 87 54 | 92 49 | 98 34  | 105 51 | 122 7   |
| 27 | 74 51 | 78 26 | 82 22 | 86 40 | 91 31 | 97 12  | 104 26 | 120 38  |
| 26 | 73 47 | 77 20 | 81 13 | 85 28 | 90 16 | 96 53  | 103 3  | 119 11  |
| 25 | 72 44 | 76 15 | 80 5  | 84 18 | 89 3  | 94 37  | 101 43 | 117 48  |
| 24 | 71 44 | 75 12 | 78 59 | 83 9  | 87 51 | 93 22  | 100 25 | 116 26  |
| 23 | 70 45 | 74 10 | 77 55 | 82 2  | 86 41 | 92 9   | 99 9   | 115 7   |
| 22 | 69 47 | 73 10 | 76 52 | 80 57 | 85 33 | 90 58  | 97 55  | 113 50  |
| 21 | 68 50 | 72 11 | 75 50 | 79 53 | 84 26 | 89 49  | 96 43  | 112 37  |
| 20 | 67 54 | 71 12 | 74 50 | 78 50 | 83 17 | 88 40  | 95 32  | 111 21  |
| 19 | 66 59 | 70 15 | 73 51 | 77 48 | 82 17 | 87 34  | 94 22  | 110 9   |
| 18 | 66 5  | 69 19 | 72 52 | 76 47 | 81 14 | 86 28  | 93 14  | 108 58  |
| 17 | 65 12 | 68 24 | 71 55 | 75 48 | 80 12 | 85 24  | 92 7   | 117 48  |
| 16 | 64 20 | 67 30 | 70 58 | 74 49 | 79 11 | 84 21  | 91 2   | 106 40  |
| 15 | 63 28 | 66 36 | 70 3  | 73 51 | 78 11 | 83 18  | 89 57  | 105 32  |
| 14 | 62 37 | 65 43 | 69 8  | 72 54 | 77 11 | 82 17  | 88 53  | 104 26  |
| 13 | 61 47 | 64 50 | 68 13 | 71 58 | 76 13 | 81 16  | 87 50  | 103 21  |
| 12 | 60 57 | 63 59 | 67 19 | 71 2  | 75 15 | 80 16  | 86 48  | 102 16  |
| 11 | 60 7  | 63 7  | 66 26 | 70 7  | 74 18 | 79 17  | 85 46  | 101 13  |
| 10 | 59 18 | 62 17 | 65 33 | 69 12 | 73 21 | 78 28  | 84 45  | 100 9   |
| 9  | 58 29 | 61 26 | 64 41 | 68 18 | 72 25 | 77 20  | 83 45  | 99 7    |
| 8  | 57 41 | 60 36 | 63 49 | 67 24 | 71 29 | 76 22  | 82 45  | 98 5    |
| 7  | 56 53 | 59 46 | 62 58 | 66 31 | 70 34 | 75 24  | 81 46  | 97 3    |
| 6  | 56 6  | 58 57 | 62 7  | 65 38 | 69 39 | 74 27  | 80 42  | 96 2    |
| 5  | 55 18 | 58 8  | 61 16 | 64 45 | 68 44 | 73 31  | 79 48  | 95 1    |
| 4  | 54 31 | 57 19 | 60 25 | 63 52 | 67 50 | 72 34  | 78 49  | 94 1    |
| 3  | 53 44 | 56 30 | 59 34 | 63 0  | 66 55 | 71 28  | 77 51  | 93 0    |
| 2  | 52 57 | 55 41 | 58 44 | 62 7  | 65 51 | 70 42  | 76 53  | 92 0    |
| 1  | 52 10 | 54 53 | 57 53 | 61 15 | 65 7  | 69 46  | 75 55  | 91 0    |
| 0  | 51 23 | 54 4  | 57 3  | 60 23 | 64 13 | 68 50  | 74 57  | 90 0    |

» n 3



# Residuum Tabule Positionum

| Elevatio | 31    | 32    | 33    | 34    | 35    | 36    | 37    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| D        | D m   | D m   | D m   | D m   | D m   | D m   | D m   |
| 0        | 36 56 | 38 40 | 40 30 | 42 25 | 44 27 | 46 36 | 48 54 |
| 1        | 36 20 | 38 3  | 39 51 | 41 45 | 43 45 | 45 52 | 48 9  |
| De       | 2     | 35 44 | 37 25 | 39 12 | 41 4  | 43 3  | 45 9  |
| cli      | 3     | 35 8  | 36 47 | 38 33 | 40 23 | 42 21 | 44 25 |
| na       | 4     | 34 32 | 36 10 | 37 54 | 39 43 | 41 39 | 43 41 |
| tio      | 5     | 33 55 | 35 32 | 37 15 | 39 2  | 40 56 | 42 57 |
| De       | 6     | 33 19 | 34 54 | 36 35 | 38 21 | 40 14 | 42 13 |
| ri       | 7     | 32 42 | 34 16 | 35 56 | 37 40 | 39 31 | 41 29 |
| di       | 8     | 32 5  | 33 38 | 35 16 | 36 59 | 38 48 | 40 44 |
| ana      | 9     | 31 28 | 32 59 | 34 36 | 36 17 | 38 5  | 40 0  |
| fu       | 10    | 30 51 | 32 20 | 33 55 | 35 35 | 37 21 | 39 14 |
| pra      | 11    | 30 14 | 31 41 | 33 15 | 34 53 | 36 38 | 38 29 |
| ter      | 12    | 29 36 | 31 2  | 32 39 | 34 10 | 35 53 | 37 43 |
| ran      | 13    | 28 58 | 30 22 | 31 53 | 33 27 | 35 9  | 36 57 |
|          | 14    | 28 19 | 29 42 | 31 11 | 32 44 | 34 24 | 36 10 |
| Et       | 15    | 27 40 | 29 2  | 30 29 | 32 0  | 33 38 | 35 22 |
| Se       | 16    | 27 1  | 28 21 | 29 46 | 31 14 | 32 52 | 34 34 |
| pten     | 17    | 26 21 | 27 39 | 29 3  | 30 31 | 32 5  | 33 46 |
| trio     | 18    | 25 40 | 26 57 | 28 19 | 29 45 | 31 18 | 32 57 |
| na       | 19    | 25 0  | 26 15 | 27 35 | 28 59 | 30 30 | 32 7  |
| lis      | 20    | 24 18 | 25 31 | 26 50 | 28 12 | 29 41 | 31 16 |
| sub      | 21    | 23 36 | 24 47 | 26 4  | 27 25 | 28 51 | 30 24 |
| ter      | 22    | 22 53 | 24 3  | 25 17 | 26 36 | 28 0  | 29 31 |
| ra       | 23    | 22 9  | 23 17 | 24 30 | 25 47 | 27 10 | 28 38 |
|          | 24    | 21 25 | 22 31 | 23 42 | 24 56 | 26 17 | 27 44 |
|          | 25    | 20 40 | 21 44 | 22 52 | 24 5  | 25 24 | 26 48 |
|          | 26    | 19 54 | 20 55 | 22 2  | 23 13 | 24 29 | 25 51 |
|          | 27    | 19 6  | 20 6  | 21 11 | 22 19 | 23 33 | 24 52 |
|          | 28    | 18 18 | 19 16 | 20 18 | 21 24 | 22 36 | 23 53 |
|          | 29    | 17 29 | 18 24 | 19 24 | 20 28 | 21 37 | 22 51 |
|          | 30    | 16 38 | 17 31 | 18 29 | 19 30 | 20 36 | 21 48 |
|          | 31    | 15 46 | 16 37 | 17 32 | 18 30 | 19 34 | 20 43 |
|          | 32    | 14 53 | 15 41 | 16 34 | 17 29 | 18 30 | 19 36 |



Ad .45. Gradus Latitudinis

|    | 38    | 39    | 40    | 41    | 42    | 43    | 44    | 45 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| S  | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m     |
| 0  | 51 23 | 54 4  | 57 3  | 60 23 | 64 13 | 68 50 | 74 57 | 90 0    |
| 1  | 50 36 | 53 15 | 56 13 | 59 31 | 63 19 | 67 54 | 73 59 | 89 0    |
| 2  | 49 49 | 52 27 | 55 22 | 58 39 | 62 25 | 66 58 | 73 1  | 88 0    |
| 3  | 49 2  | 51 38 | 54 32 | 57 46 | 61 31 | 66 2  | 72 3  | 87 0    |
| 4  | 48 15 | 50 49 | 53 41 | 56 54 | 60 36 | 65 6  | 71 5  | 85 59   |
| 5  | 47 28 | 50 0  | 52 50 | 56 1  | 59 42 | 64 9  | 70 6  | 84 59   |
| 6  | 46 40 | 49 11 | 51 59 | 55 8  | 58 47 | 63 13 | 69 7  | 83 58   |
| 7  | 45 53 | 48 22 | 51 8  | 54 15 | 57 52 | 62 16 | 68 8  | 82 57   |
| 8  | 45 5  | 47 32 | 50 17 | 53 22 | 56 57 | 61 18 | 67 9  | 81 55   |
| 9  | 44 17 | 46 42 | 49 25 | 52 28 | 56 1  | 60 20 | 66 9  | 80 53   |
| 10 | 43 28 | 45 51 | 48 33 | 51 34 | 55 5  | 59 22 | 65 9  | 79 51   |
| 11 | 42 39 | 45 1  | 47 40 | 50 39 | 54 8  | 58 23 | 64 8  | 78 47   |
| 12 | 41 49 | 44 9  | 46 47 | 49 44 | 53 11 | 57 24 | 63 6  | 77 44   |
| 13 | 40 59 | 43 18 | 45 53 | 48 48 | 52 13 | 56 24 | 62 4  | 76 39   |
| 14 | 40 9  | 42 25 | 44 58 | 47 52 | 51 15 | 55 23 | 61 1  | 75 34   |
| 15 | 39 18 | 41 32 | 44 3  | 46 55 | 50 15 | 54 22 | 59 57 | 74 28   |
| 16 | 38 26 | 40 38 | 43 8  | 45 57 | 49 15 | 53 19 | 58 52 | 73 20   |
| 17 | 37 34 | 39 44 | 42 11 | 44 58 | 48 14 | 52 16 | 57 46 | 72 12   |
| 18 | 36 41 | 38 49 | 41 14 | 43 59 | 47 12 | 51 12 | 56 40 | 71 2    |
| 19 | 35 47 | 37 53 | 40 15 | 42 58 | 46 9  | 50 6  | 55 32 | 69 51   |
| 20 | 34 52 | 36 56 | 39 16 | 41 56 | 45 5  | 49 0  | 54 22 | 68 39   |
| 21 | 33 56 | 35 57 | 38 16 | 40 53 | 44 0  | 47 51 | 53 11 | 67 26   |
| 22 | 32 59 | 34 58 | 37 14 | 39 49 | 42 53 | 46 42 | 51 59 | 66 10   |
| 23 | 32 1  | 33 58 | 36 11 | 38 44 | 41 45 | 45 31 | 50 45 | 64 53   |
| 24 | 31 2  | 32 56 | 35 7  | 37 37 | 40 35 | 44 18 | 49 29 | 63 34   |
| 25 | 30 2  | 31 53 | 34 1  | 36 28 | 39 23 | 43 3  | 48 11 | 62 12   |
| 26 | 28 59 | 30 48 | 32 53 | 35 18 | 38 10 | 41 47 | 46 51 | 60 49   |
| 27 | 27 55 | 29 42 | 31 44 | 34 6  | 36 55 | 40 28 | 45 28 | 59 22   |
| 28 | 26 50 | 28 34 | 30 33 | 32 52 | 35 37 | 39 6  | 44 3  | 57 53   |
| 29 | 25 43 | 27 24 | 29 20 | 31 35 | 34 16 | 37 42 | 42 35 | 56 20   |
| 30 | 24 34 | 26 12 | 28 4  | 30 16 | 32 54 | 36 15 | 41 4  | 54 44   |
| 31 | 23 23 | 24 57 | 26 46 | 28 54 | 31 28 | 34 45 | 39 29 | 53 4    |
| 32 | 22 10 | 23 40 | 25 26 | 27 29 | 29 59 | 33 12 | 37 50 | 51 20   |



# Tabula Positionum

| Elenatio | 1    | 2    | 3    | 4    | 5    | 6    | 7     | 8     |
|----------|------|------|------|------|------|------|-------|-------|
| B        | B m  | B m  | B m  | B m  | B m  | B m  | B m   | B m   |
| 32       | 1 31 | 3 3  | 4 35 | 6 7  | 7 39 | 9 12 | 10 45 | 12 18 |
| 31       | 1 30 | 3 9  | 4 30 | 6 1  | 7 32 | 9 3  | 10 35 | 12 7  |
| De       | 30   | 1 29 | 2 57 | 4 26 | 5 56 | 7 25 | 8 55  | 10 25 |
| cli      | 29   | 1 27 | 2 55 | 4 22 | 5 50 | 7 18 | 8 46  | 10 15 |
| na       | 28   | 1 26 | 2 52 | 4 18 | 5 45 | 7 11 | 8 38  | 10 6  |
| tio      | 27   | 1 25 | 2 49 | 4 14 | 5 40 | 7 4  | 8 30  | 9 56  |
| Se       | 26   | 1 23 | 2 47 | 4 10 | 5 34 | 6 58 | 8 22  | 9 47  |
| pten     | 25   | 1 22 | 2 44 | 4 6  | 5 29 | 6 51 | 8 15  | 9 38  |
| rio      | 24   | 1 21 | 2 41 | 4 2  | 5 24 | 6 45 | 8 7   | 9 29  |
| na       | 23   | 1 19 | 2 39 | 3 59 | 5 19 | 6 39 | 7 59  | 9 20  |
| lis      | 22   | 1 18 | 2 37 | 3 55 | 5 14 | 6 33 | 7 52  | 9 12  |
| fu       | 21   | 1 17 | 2 34 | 3 51 | 5 9  | 6 26 | 7 45  | 9 3   |
| pra      | 20   | 1 16 | 2 32 | 3 48 | 5 4  | 6 20 | 7 28  | 8 55  |
| ter      | 19   | 1 15 | 2 29 | 3 44 | 5 0  | 6 15 | 7 30  | 8 46  |
| ram      | 18   | 1 13 | 2 27 | 3 41 | 4 55 | 6 9  | 7 23  | 8 38  |
|          | 17   | 1 12 | 2 25 | 3 37 | 4 51 | 6 3  | 7 16  | 8 30  |
| Et       | 16   | 1 11 | 2 22 | 3 34 | 4 46 | 5 57 | 7 10  | 8 22  |
| Mc       | 15   | 1 10 | 2 20 | 3 30 | 4 41 | 5 52 | 7 3   | 8 14  |
| ri       | 14   | 1 9  | 2 18 | 3 27 | 4 37 | 5 46 | 6 56  | 8 6   |
| di       | 13   | 1 8  | 2 16 | 3 24 | 4 33 | 5 40 | 6 49  | 7 58  |
| ana      | 12   | 1 7  | 2 13 | 3 20 | 4 28 | 5 35 | 6 43  | 7 51  |
| sub      | 11   | 1 6  | 2 11 | 3 17 | 4 24 | 5 29 | 6 36  | 7 43  |
| ter      | 10   | 1 5  | 2 9  | 3 14 | 4 19 | 5 24 | 6 30  | 7 35  |
| ra       | 9    | 1 3  | 2 7  | 3 11 | 4 15 | 5 19 | 6 23  | 7 28  |
|          | 8    | 1 2  | 2 5  | 3 7  | 4 11 | 5 13 | 6 17  | 7 20  |
|          | 7    | 1 1  | 2 3  | 3 4  | 4 7  | 5 8  | 6 10  | 7 13  |
|          | 6    | 1 0  | 2 1  | 3 1  | 4 2  | 5 3  | 6 4   | 7 5   |
|          | 5    | 0 59 | 1 58 | 2 58 | 3 58 | 4 57 | 5 58  | 6 58  |
|          | 4    | 0 58 | 1 56 | 2 55 | 3 54 | 4 52 | 5 51  | 6 51  |
|          | 3    | 0 57 | 1 54 | 2 51 | 3 50 | 4 47 | 5 45  | 6 43  |
|          | 2    | 0 56 | 1 52 | 2 48 | 3 45 | 4 41 | 5 39  | 6 36  |
|          | 1    | 0 55 | 1 50 | 2 45 | 3 41 | 4 36 | 5 32  | 6 28  |
|          | 0    | 0 54 | 1 48 | 2 42 | 3 37 | 4 31 | 5 26  | 6 21  |



Ad .48. Gradus Latitudinis

|    | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17  |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m |
| 32 | 13 53 | 15 28 | 17 4  | 18 40 | 20 18 | 21 56 | 23 36 | 25 17 |     |
| 31 | 13 40 | 15 13 | 16 47 | 18 22 | 19 58 | 21 35 | 23 14 | 24 53 |     |
| 30 | 13 27 | 14 59 | 16 32 | 18 5  | 19 40 | 21 15 | 22 52 | 24 30 |     |
| 29 | 13 14 | 14 45 | 16 16 | 17 48 | 19 21 | 20 55 | 22 30 | 24 7  |     |
| 28 | 13 2  | 14 31 | 16 1  | 17 31 | 19 3  | 20 35 | 22 9  | 23 44 |     |
| 27 | 12 50 | 14 17 | 15 46 | 17 15 | 18 45 | 20 16 | 21 49 | 23 22 |     |
| 26 | 12 38 | 14 4  | 15 31 | 16 59 | 18 28 | 19 57 | 21 29 | 23 0  |     |
| 25 | 12 26 | 13 51 | 15 17 | 16 43 | 18 11 | 19 39 | 21 9  | 22 39 |     |
| 24 | 12 15 | 13 38 | 15 3  | 16 28 | 17 54 | 19 20 | 20 49 | 22 18 |     |
| 23 | 12 3  | 13 26 | 14 49 | 16 13 | 17 37 | 19 3  | 20 30 | 21 57 |     |
| 22 | 11 52 | 13 13 | 14 35 | 15 58 | 17 21 | 18 45 | 20 11 | 21 37 |     |
| 21 | 11 41 | 13 1  | 14 22 | 15 43 | 17 5  | 18 28 | 19 52 | 21 17 |     |
| 20 | 11 30 | 12 49 | 14 8  | 15 28 | 16 49 | 18 10 | 19 34 | 20 57 |     |
| 19 | 11 20 | 12 37 | 13 55 | 15 14 | 16 34 | 17 53 | 19 16 | 20 38 |     |
| 18 | 11 9  | 12 25 | 13 42 | 15 0  | 16 18 | 17 37 | 18 58 | 20 19 |     |
| 17 | 10 59 | 12 13 | 13 29 | 14 46 | 16 3  | 17 20 | 18 40 | 20 0  |     |
| 16 | 10 48 | 12 2  | 13 17 | 14 32 | 15 48 | 17 4  | 18 22 | 19 41 |     |
| 15 | 10 38 | 11 50 | 13 4  | 14 18 | 15 33 | 16 48 | 18 5  | 19 22 |     |
| 14 | 10 28 | 11 39 | 12 52 | 14 4  | 15 18 | 16 32 | 17 48 | 19 4  |     |
| 13 | 10 18 | 11 28 | 12 39 | 13 51 | 15 3  | 16 16 | 17 31 | 18 46 |     |
| 12 | 10 8  | 11 17 | 12 27 | 13 37 | 14 49 | 16 0  | 17 14 | 18 28 |     |
| 11 | 9 58  | 11 6  | 12 15 | 13 24 | 14 34 | 15 45 | 16 57 | 18 10 |     |
| 10 | 9 48  | 10 55 | 12 3  | 13 11 | 14 20 | 15 29 | 16 40 | 17 52 |     |
| 9  | 9 38  | 10 44 | 11 51 | 12 58 | 14 6  | 15 14 | 16 24 | 17 34 |     |
| 8  | 9 28  | 10 33 | 11 39 | 12 45 | 13 52 | 14 58 | 16 7  | 17 17 |     |
| 7  | 9 19  | 10 22 | 11 27 | 12 32 | 13 37 | 14 43 | 15 51 | 16 59 |     |
| 6  | 9 9   | 10 12 | 11 15 | 12 19 | 13 23 | 14 28 | 15 35 | 16 42 |     |
| 5  | 9 0   | 10 1  | 11 3  | 12 6  | 13 9  | 14 13 | 15 19 | 16 24 |     |
| 4  | 8 50  | 9 50  | 10 52 | 11 53 | 12 56 | 13 58 | 15 2  | 16 7  |     |
| 3  | 8 41  | 9 40  | 10 40 | 11 40 | 12 42 | 13 43 | 14 46 | 15 50 |     |
| 2  | 8 31  | 9 29  | 10 28 | 11 27 | 12 28 | 13 28 | 14 30 | 15 32 |     |
| 1  | 8 21  | 9 19  | 10 17 | 11 15 | 12 14 | 13 13 | 14 14 | 15 15 |     |
| 0  | 8 12  | 9 8   | 10 5  | 11 2  | 12 0  | 12 58 | 13 58 | 14 58 |     |



# Residuum Tabule Positionum

| Elemento | 1  | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|----------|----|------|------|------|------|------|------|------|
|          | S  | S m  | S m  | S m  | S m  | S m  | S m  | S m  |
|          | 0  | 0 54 | 1 48 | 2 42 | 3 37 | 4 31 | 5 26 | 6 21 |
|          | 1  | 0 53 | 1 46 | 2 39 | 3 33 | 4 26 | 5 19 | 6 14 |
| De       | 2  | 0 52 | 1 44 | 2 36 | 3 29 | 4 21 | 5 13 | 6 6  |
| cli      | 3  | 0 51 | 1 42 | 2 33 | 3 24 | 4 15 | 5 7  | 5 59 |
| na       | 4  | 0 50 | 1 40 | 2 29 | 3 20 | 4 10 | 5 1  | 5 41 |
| cio      | 5  | 0 49 | 1 38 | 2 26 | 3 16 | 4 5  | 4 54 | 5 44 |
| De       | 6  | 0 48 | 1 35 | 2 23 | 3 12 | 3 59 | 4 48 | 5 37 |
| ri       | 7  | 0 47 | 1 43 | 2 20 | 3 7  | 3 55 | 4 42 | 5 29 |
| ai       | 8  | 0 46 | 1 31 | 2 17 | 3 3  | 3 49 | 4 35 | 5 22 |
| ana      | 9  | 0 45 | 1 29 | 2 13 | 2 59 | 3 43 | 4 29 | 5 14 |
| lu       | 10 | 0 43 | 1 27 | 2 10 | 2 55 | 3 38 | 4 22 | 5 7  |
| pra      | 11 | 0 42 | 1 25 | 2 7  | 2 50 | 3 33 | 4 16 | 4 59 |
| ter      | 12 | 0 41 | 1 23 | 2 4  | 2 46 | 3 27 | 4 9  | 4 51 |
| ram      | 13 | 0 40 | 1 20 | 2 0  | 2 41 | 3 22 | 4 3  | 4 44 |
|          | 14 | 0 39 | 1 18 | 1 57 | 2 37 | 3 16 | 4 56 | 4 36 |
| Et       | 15 | 0 38 | 1 16 | 1 54 | 2 33 | 3 10 | 3 49 | 4 28 |
| Se       | 16 | 0 37 | 1 14 | 1 50 | 2 28 | 3 5  | 3 42 | 4 20 |
| pten     | 17 | 0 36 | 1 11 | 1 47 | 2 23 | 2 59 | 3 36 | 4 12 |
| trio     | 18 | 0 35 | 1 9  | 1 43 | 2 19 | 2 52 | 3 29 | 4 4  |
| na       | 19 | 0 33 | 1 7  | 1 40 | 2 14 | 2 47 | 3 22 | 3 56 |
| lis      | 20 | 0 32 | 1 4  | 1 36 | 2 10 | 2 42 | 3 14 | 3 47 |
| sub      | 21 | 0 31 | 1 2  | 1 33 | 2 5  | 2 36 | 3 7  | 3 39 |
| ter      | 22 | 0 30 | 0 59 | 1 29 | 2 0  | 2 29 | 3 0  | 3 30 |
| ra       | 23 | 0 29 | 0 57 | 1 27 | 1 55 | 2 23 | 2 53 | 3 22 |
|          | 24 | 0 27 | 0 55 | 1 22 | 1 50 | 2 17 | 2 45 | 3 13 |
|          | 25 | 0 26 | 0 52 | 1 18 | 1 45 | 2 11 | 2 37 | 3 4  |
|          | 26 | 0 25 | 0 49 | 1 14 | 1 40 | 2 4  | 2 30 | 2 55 |
|          | 27 | 0 23 | 0 47 | 1 10 | 1 34 | 1 58 | 2 22 | 2 46 |
|          | 28 | 0 22 | 0 44 | 1 6  | 1 29 | 1 51 | 2 14 | 2 36 |
|          | 29 | 0 21 | 0 41 | 1 2  | 1 24 | 1 44 | 2 6  | 2 27 |
|          | 30 | 0 19 | 0 39 | 0 58 | 1 18 | 1 37 | 1 57 | 2 17 |
|          | 31 | 0 18 | 0 36 | 0 54 | 1 13 | 1 30 | 1 49 | 2 7  |
|          | 32 | 0 17 | 0 33 | 0 49 | 1 7  | 1 23 | 1 40 | 2 57 |



Ad .48. gradus Latitudinis.

|    | 9    | 10   | 11   | 12    | 13    | 14    | 15    | 16 poli |
|----|------|------|------|-------|-------|-------|-------|---------|
| S  | S m  | S m  | S m  | S m   | S m   | S m   | S m   | S m     |
| 0  | 8 12 | 9 8  | 10 5 | 11 2  | 12 0  | 12 58 | 13 58 | 14 58   |
| 1  | 8 3  | 8 57 | 9 53 | 10 49 | 11 46 | 12 43 | 13 42 | 14 41   |
| 2  | 7 53 | 8 47 | 9 42 | 10 37 | 11 32 | 12 28 | 13 26 | 14 24   |
| 3  | 7 43 | 8 36 | 9 30 | 10 24 | 11 18 | 12 13 | 13 10 | 14 6    |
| 4  | 7 34 | 8 26 | 9 18 | 10 5  | 11 4  | 11 58 | 12 54 | 13 49   |
| 5  | 7 24 | 8 15 | 9 7  | 9 58  | 10 51 | 11 43 | 12 37 | 13 32   |
| 6  | 7 15 | 8 4  | 8 55 | 9 45  | 10 37 | 11 28 | 12 21 | 13 14   |
| 7  | 7 5  | 7 53 | 8 43 | 9 32  | 10 23 | 11 13 | 12 5  | 12 57   |
| 8  | 6 56 | 7 43 | 8 31 | 9 19  | 10 8  | 10 58 | 11 49 | 12 39   |
| 9  | 6 46 | 7 32 | 8 19 | 9 6   | 9 54  | 10 42 | 11 32 | 12 22   |
| 10 | 6 36 | 7 21 | 8 7  | 8 53  | 9 40  | 10 27 | 11 16 | 12 4    |
| 11 | 6 26 | 7 10 | 7 55 | 8 40  | 9 26  | 10 11 | 10 59 | 11 46   |
| 12 | 6 16 | 6 59 | 7 43 | 8 27  | 9 11  | 9 56  | 10 42 | 11 28   |
| 13 | 6 6  | 6 48 | 7 41 | 8 13  | 8 57  | 9 40  | 10 25 | 11 10   |
| 14 | 5 56 | 6 37 | 7 18 | 8 0   | 8 42  | 9 24  | 10 8  | 10 52   |
| 15 | 5 46 | 6 26 | 7 6  | 7 46  | 8 27  | 9 8   | 9 51  | 10 34   |
| 16 | 5 36 | 6 14 | 6 53 | 7 32  | 8 12  | 8 52  | 9 34  | 10 15   |
| 17 | 5 25 | 6 3  | 6 41 | 7 18  | 7 57  | 8 36  | 9 16  | 9 56    |
| 18 | 5 15 | 5 51 | 6 28 | 7 4   | 7 42  | 8 19  | 8 58  | 9 37    |
| 19 | 5 4  | 5 39 | 6 15 | 6 50  | 7 26  | 8 3   | 8 40  | 9 18    |
| 20 | 4 54 | 5 27 | 6 2  | 6 36  | 7 11  | 7 46  | 8 22  | 8 59    |
| 21 | 4 43 | 5 15 | 5 48 | 6 21  | 6 55  | 7 28  | 8 4   | 8 39    |
| 22 | 4 32 | 5 3  | 5 35 | 6 6   | 6 39  | 7 11  | 7 45  | 8 19    |
| 23 | 4 21 | 4 50 | 5 21 | 5 51  | 6 23  | 6 53  | 7 26  | 7 59    |
| 24 | 4 9  | 4 38 | 5 7  | 5 36  | 6 6   | 6 36  | 7 7   | 7 38    |
| 25 | 3 58 | 4 25 | 4 53 | 5 21  | 5 49  | 6 17  | 6 47  | 6 17    |
| 26 | 3 46 | 4 12 | 4 39 | 5 5   | 5 32  | 5 59  | 6 27  | 6 56    |
| 27 | 3 34 | 3 59 | 4 24 | 4 49  | 5 15  | 5 40  | 6 6   | 6 34    |
| 28 | 3 22 | 3 45 | 4 9  | 4 33  | 4 57  | 5 21  | 5 47  | 6 12    |
| 29 | 3 10 | 3 31 | 3 54 | 4 16  | 4 39  | 5 1   | 5 26  | 5 49    |
| 30 | 2 57 | 3 17 | 3 38 | 3 59  | 4 20  | 4 41  | 5 4   | 5 26    |
| 31 | 2 44 | 3 3  | 3 23 | 3 42  | 4 2   | 4 21  | 4 42  | 5 3     |
| 32 | 2 31 | 2 48 | 3 6  | 3 24  | 3 42  | 4 0   | 4 20  | 4 39    |



# Residuum Tabule Positionum

| Elemento | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32       | 27 0  | 28 44 | 30 29 | 32 17 | 34 6  | 35 57 | 37 51 | 39 47 |
| 31       | 26 34 | 28 17 | 30 0  | 31 46 | 33 33 | 35 23 | 37 15 | 39 9  |
| De       | 30    | 26 9  | 27 50 | 29 32 | 31 16 | 33 1  | 34 49 | 36 39 |
| cl       | 29    | 25 44 | 27 24 | 29 4  | 30 46 | 32 30 | 34 16 | 36 5  |
| na       | 28    | 25 20 | 26 58 | 28 37 | 30 17 | 32 0  | 33 44 | 35 31 |
| no       | 27    | 24 57 | 26 33 | 28 10 | 29 49 | 31 30 | 33 13 | 34 57 |
| Se       | 26    | 24 34 | 26 8  | 27 44 | 29 22 | 31 0  | 32 4  | 34 25 |
| pien     | 25    | 24 11 | 25 44 | 27 18 | 28 54 | 30 32 | 32 12 | 33 53 |
| rio      | 24    | 23 48 | 25 20 | 26 53 | 28 27 | 30 3  | 31 42 | 33 22 |
| na       | 23    | 23 26 | 24 57 | 26 28 | 28 1  | 29 35 | 31 13 | 32 51 |
| ha       | 22    | 23 5  | 24 34 | 26 4  | 27 35 | 29 8  | 30 4  | 32 21 |
| fu       | 21    | 22 43 | 24 11 | 25 40 | 27 10 | 28 41 | 30 15 | 31 51 |
| pra      | 20    | 22 22 | 23 48 | 25 16 | 26 45 | 28 15 | 29 47 | 31 21 |
| ter      | 19    | 22 2  | 23 26 | 24 53 | 26 20 | 27 49 | 29 20 | 30 52 |
| ram      | 18    | 21 41 | 23 5  | 24 29 | 25 55 | 27 23 | 28 53 | 30 24 |
|          | 17    | 21 21 | 22 43 | 24 6  | 25 31 | 26 57 | 28 26 | 29 55 |
| Et       | 16    | 21 1  | 22 22 | 23 44 | 25 7  | 26 32 | 27 59 | 29 27 |
| Me       | 15    | 20 41 | 22 1  | 23 22 | 24 44 | 26 7  | 27 33 | 29 0  |
| ri       | 14    | 20 21 | 21 40 | 22 59 | 24 20 | 25 43 | 27 7  | 28 33 |
| di       | 13    | 20 2  | 21 19 | 22 38 | 23 57 | 25 18 | 26 41 | 28 6  |
| ana      | 12    | 19 43 | 20 59 | 22 16 | 23 34 | 24 54 | 26 16 | 27 39 |
| sub      | 11    | 19 23 | 20 38 | 21 54 | 23 11 | 24 30 | 25 50 | 27 12 |
| ter      | 10    | 19 4  | 20 18 | 21 33 | 22 49 | 24 6  | 25 25 | 26 46 |
| ra       | 9     | 18 46 | 19 58 | 21 12 | 22 26 | 23 42 | 25 0  | 26 18 |
|          | 8     | 18 27 | 19 38 | 20 50 | 22 4  | 23 19 | 24 35 | 25 53 |
|          | 7     | 18 8  | 19 18 | 20 29 | 21 42 | 22 55 | 24 11 | 25 27 |
|          | 6     | 17 49 | 18 58 | 20 8  | 21 20 | 22 32 | 23 46 | 25 1  |
|          | 5     | 17 31 | 18 39 | 19 48 | 20 57 | 22 8  | 23 22 | 24 36 |
|          | 4     | 17 13 | 18 19 | 19 27 | 20 35 | 21 45 | 22 57 | 24 10 |
|          | 3     | 16 54 | 18 0  | 19 6  | 20 14 | 21 22 | 22 33 | 23 45 |
|          | 2     | 16 36 | 17 40 | 18 45 | 19 52 | 20 59 | 22 9  | 23 19 |
|          | 1     | 16 17 | 17 20 | 18 25 | 19 30 | 20 36 | 21 44 | 22 53 |
|          | 0     | 15 59 | 17 1  | 18 4  | 19 8  | 20 13 | 21 20 | 22 28 |



Ad .48. Gradus Latitudinis

|    | 25    | 26    | 27    | 28    | 29    | 30    | 31    | 32 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| S  | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m     |
| 32 | 41 46 | 43 48 | 45 52 | 48 0  | 50 12 | 52 28 | 54 48 | 57 13   |
| 31 | 41 6  | 43 5  | 45 8  | 47 14 | 49 23 | 51 37 | 53 55 | 56 17   |
| 30 | 40 27 | 42 24 | 44 24 | 46 29 | 48 36 | 50 47 | 53 3  | 55 23   |
| 29 | 39 49 | 41 44 | 43 42 | 45 44 | 47 50 | 49 59 | 52 12 | 54 30   |
| 28 | 39 11 | 41 5  | 43 1  | 45 1  | 47 4  | 49 12 | 51 23 | 53 38   |
| 27 | 38 35 | 40 26 | 42 21 | 44 19 | 46 20 | 48 25 | 50 35 | 52 48   |
| 26 | 37 59 | 39 49 | 41 41 | 43 38 | 45 37 | 47 40 | 49 47 | 51 59   |
| 25 | 37 24 | 39 12 | 41 3  | 42 57 | 44 55 | 46 56 | 49 1  | 51 10   |
| 24 | 36 49 | 38 36 | 40 25 | 42 18 | 44 13 | 46 13 | 48 16 | 50 23   |
| 23 | 36 15 | 38 0  | 39 47 | 41 39 | 43 33 | 45 30 | 47 32 | 49 37   |
| 22 | 35 42 | 37 25 | 39 11 | 41 0  | 42 52 | 44 48 | 46 48 | 48 51   |
| 21 | 35 9  | 36 50 | 38 35 | 40 22 | 42 13 | 44 7  | 46 5  | 48 7    |
| 20 | 34 36 | 36 17 | 37 59 | 39 45 | 41 34 | 43 27 | 45 23 | 47 23   |
| 19 | 34 4  | 35 43 | 37 24 | 39 9  | 40 56 | 42 47 | 44 41 | 46 39   |
| 18 | 33 33 | 35 10 | 36 50 | 38 33 | 40 19 | 42 8  | 44 1  | 45 57   |
| 17 | 33 2  | 34 38 | 36 16 | 37 57 | 39 41 | 41 29 | 43 20 | 45 15   |
| 16 | 32 31 | 34 6  | 35 42 | 37 22 | 39 4  | 40 51 | 42 40 | 44 33   |
| 15 | 32 1  | 33 34 | 35 9  | 36 47 | 38 28 | 40 13 | 42 1  | 43 52   |
| 14 | 31 31 | 33 2  | 34 36 | 36 13 | 37 52 | 39 36 | 41 22 | 43 12   |
| 13 | 31 1  | 32 31 | 34 3  | 35 39 | 37 17 | 38 59 | 40 43 | 42 32   |
| 12 | 30 31 | 32 0  | 33 31 | 35 5  | 36 42 | 38 22 | 40 5  | 41 52   |
| 11 | 30 2  | 31 29 | 32 59 | 34 32 | 36 7  | 37 46 | 39 27 | 41 13   |
| 10 | 29 33 | 30 59 | 32 25 | 33 59 | 35 33 | 37 10 | 38 50 | 40 34   |
| 9  | 29 4  | 30 29 | 31 56 | 33 26 | 34 58 | 36 34 | 38 13 | 39 55   |
| 8  | 28 35 | 29 59 | 31 24 | 32 53 | 34 24 | 35 58 | 37 36 | 39 16   |
| 7  | 28 7  | 29 29 | 30 53 | 32 21 | 33 50 | 35 23 | 36 59 | 38 38   |
| 6  | 27 39 | 28 59 | 30 22 | 31 48 | 33 16 | 34 48 | 36 22 | 38 0    |
| 5  | 27 10 | 28 30 | 29 51 | 31 16 | 32 43 | 34 13 | 35 46 | 37 22   |
| 4  | 26 42 | 28 0  | 29 21 | 30 44 | 32 9  | 33 38 | 35 9  | 36 44   |
| 3  | 26 14 | 27 31 | 28 50 | 30 12 | 31 36 | 33 3  | 34 33 | 36 7    |
| 2  | 25 46 | 27 2  | 28 19 | 29 40 | 31 3  | 32 28 | 33 57 | 35 29   |
| 1  | 25 18 | 26 32 | 27 49 | 29 8  | 30 29 | 31 54 | 33 21 | 34 51   |
| 0  | 24 50 | 26 3  | 27 18 | 28 36 | 29 56 | 31 19 | 32 45 | 34 14   |



# Residuum Tabule Positionum

| Elenatio | 17 | 18    | 19    | 20    | 21    | 22    | 23    | 24    |
|----------|----|-------|-------|-------|-------|-------|-------|-------|
|          | B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
|          | 0  | 15 59 | 17 1  | 18 4  | 19 8  | 20 13 | 21 20 | 22 28 |
|          | 1  | 15 41 | 16 42 | 17 43 | 18 46 | 19 50 | 20 56 | 22 3  |
| De       | 2  | 15 22 | 16 22 | 17 23 | 18 24 | 19 27 | 20 31 | 21 37 |
| cli      | 3  | 15 4  | 16 2  | 17 2  | 18 2  | 19 4  | 20 7  | 21 11 |
| na       | 4  | 14 45 | 15 43 | 16 41 | 17 41 | 18 41 | 19 43 | 20 46 |
| cio      | 5  | 14 27 | 15 23 | 16 20 | 17 19 | 18 18 | 19 18 | 20 20 |
| De       | 6  | 14 9  | 15 5  | 16 0  | 16 56 | 17 54 | 18 54 | 19 55 |
| ri       | 7  | 13 50 | 14 44 | 15 39 | 16 34 | 17 31 | 18 29 | 19 29 |
| di       | 8  | 13 31 | 14 24 | 15 18 | 16 12 | 17 7  | 18 5  | 19 3  |
| ana      | 9  | 13 12 | 14 4  | 14 56 | 15 50 | 16 44 | 17 40 | 18 37 |
| fu       | 10 | 12 54 | 13 44 | 14 35 | 15 27 | 16 20 | 17 15 | 18 10 |
| pra      | 11 | 12 35 | 13 24 | 14 14 | 15 5  | 15 56 | 16 50 | 17 44 |
| ter      | 12 | 12 15 | 13 3  | 13 52 | 14 42 | 15 32 | 16 24 | 17 17 |
| ram      | 13 | 11 56 | 12 43 | 13 30 | 14 19 | 15 8  | 15 59 | 16 50 |
|          | 14 | 11 37 | 12 22 | 13 9  | 13 56 | 14 43 | 15 33 | 16 23 |
| Et       | 15 | 11 17 | 12 1  | 12 46 | 13 32 | 14 19 | 15 7  | 15 56 |
| Se       | 16 | 10 57 | 11 40 | 12 24 | 13 9  | 13 54 | 14 41 | 15 29 |
| pten     | 17 | 10 37 | 11 19 | 12 2  | 12 45 | 13 29 | 14 14 | 15 1  |
| rio      | 18 | 10 17 | 10 57 | 11 39 | 12 21 | 13 3  | 13 47 | 14 32 |
| na       | 19 | 9 56  | 10 36 | 11 15 | 11 56 | 12 37 | 13 20 | 14 4  |
| lis      | 20 | 9 36  | 10 14 | 10 52 | 11 31 | 12 11 | 12 53 | 13 35 |
| sub      | 21 | 9 15  | 9 51  | 10 28 | 11 6  | 11 45 | 12 25 | 13 5  |
| ter      | 22 | 8 53  | 9 28  | 10 4  | 10 41 | 11 18 | 11 56 | 12 35 |
| ra       | 23 | 8 32  | 9 5   | 9 40  | 10 15 | 10 51 | 11 27 | 12 5  |
|          | 24 | 8 10  | 8 42  | 9 15  | 9 49  | 10 23 | 10 58 | 11 34 |
|          | 25 | 7 47  | 8 18  | 8 50  | 9 22  | 9 54  | 10 28 | 11 3  |
|          | 26 | 7 24  | 7 54  | 8 24  | 8 54  | 9 26  | 9 58  | 10 31 |
|          | 27 | 7 1   | 7 29  | 7 58  | 8 27  | 8 56  | 9 27  | 9 59  |
|          | 28 | 6 38  | 7 4   | 7 31  | 7 59  | 8 26  | 8 56  | 9 25  |
|          | 29 | 6 14  | 6 38  | 7 4   | 7 30  | 7 56  | 8 24  | 8 49  |
|          | 30 | 5 49  | 6 12  | 6 36  | 7 0   | 7 25  | 7 51  | 8 17  |
|          | 31 | 5 24  | 5 45  | 6 8   | 6 30  | 6 53  | 7 17  | 7 41  |
|          | 32 | 4 58  | 5 18  | 5 39  | 5 59  | 6 20  | 6 43  | 7 5   |



Ad .48. grade Latitudinis

|    | 25    | 26    | 27    | 28    | 29    | 30    | 31    | 32 pol. |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m     |
| 0  | 24 50 | 26 3  | 27 18 | 28 38 | 29 56 | 31 19 | 32 45 | 34 15   |
| 1  | 24 22 | 25 34 | 26 47 | 28 4  | 29 23 | 30 44 | 32 9  | 33 37   |
| 2  | 23 54 | 25 3  | 26 17 | 27 32 | 28 49 | 30 10 | 31 33 | 32 51   |
| 3  | 23 26 | 24 35 | 25 46 | 27 0  | 28 16 | 29 35 | 30 57 | 32 23   |
| 4  | 22 58 | 24 6  | 25 15 | 26 28 | 27 43 | 29 0  | 30 21 | 31 44   |
| 5  | 22 30 | 23 36 | 24 45 | 25 56 | 27 9  | 28 25 | 29 44 | 31 6    |
| 6  | 22 1  | 23 7  | 24 14 | 25 24 | 26 36 | 27 50 | 29 8  | 30 28   |
| 7  | 21 33 | 22 37 | 23 43 | 24 51 | 26 2  | 27 15 | 28 31 | 29 50   |
| 8  | 21 5  | 22 7  | 23 12 | 24 19 | 25 28 | 26 40 | 27 54 | 29 12   |
| 9  | 20 36 | 21 37 | 22 40 | 23 46 | 24 54 | 26 4  | 27 17 | 28 33   |
| 10 | 20 7  | 21 7  | 22 9  | 23 13 | 24 19 | 25 28 | 26 40 | 27 54   |
| 11 | 19 38 | 20 37 | 21 37 | 22 40 | 23 45 | 24 52 | 26 3  | 27 15   |
| 12 | 19 9  | 20 6  | 21 5  | 22 7  | 23 16 | 24 16 | 25 25 | 26 36   |
| 13 | 18 39 | 19 35 | 20 33 | 21 33 | 22 35 | 23 39 | 24 47 | 25 56   |
| 14 | 18 9  | 19 4  | 20 0  | 20 59 | 22 0  | 23 2  | 24 8  | 25 16   |
| 15 | 17 39 | 18 32 | 19 27 | 20 25 | 21 24 | 22 25 | 23 29 | 24 36   |
| 16 | 17 9  | 18 0  | 18 54 | 19 50 | 20 48 | 21 47 | 22 50 | 23 55   |
| 17 | 16 38 | 17 28 | 18 20 | 19 15 | 20 11 | 21 9  | 22 10 | 23 13   |
| 18 | 16 7  | 16 56 | 17 46 | 18 39 | 19 33 | 20 30 | 21 29 | 22 31   |
| 19 | 15 36 | 16 23 | 17 12 | 18 3  | 18 56 | 19 51 | 20 49 | 21 49   |
| 20 | 15 4  | 15 49 | 16 37 | 17 27 | 18 18 | 19 11 | 20 7  | 21 5    |
| 21 | 14 31 | 15 16 | 16 1  | 16 50 | 17 39 | 18 31 | 19 25 | 20 21   |
| 22 | 13 58 | 14 41 | 15 25 | 16 12 | 17 0  | 17 50 | 18 42 | 19 37   |
| 23 | 13 25 | 14 6  | 14 49 | 15 33 | 16 19 | 17 8  | 17 58 | 18 51   |
| 24 | 12 51 | 13 30 | 14 11 | 14 54 | 15 39 | 16 25 | 17 14 | 18 5    |
| 25 | 12 16 | 12 54 | 13 33 | 14 15 | 14 57 | 15 42 | 16 29 | 17 18   |
| 26 | 11 41 | 12 17 | 12 55 | 13 34 | 14 15 | 14 58 | 15 43 | 16 29   |
| 27 | 11 5  | 11 40 | 12 15 | 12 53 | 13 32 | 14 13 | 14 55 | 15 40   |
| 28 | 10 29 | 11 1  | 11 35 | 12 11 | 12 48 | 13 26 | 14 7  | 14 50   |
| 29 | 9 51  | 10 22 | 10 54 | 11 28 | 12 2  | 12 39 | 13 18 | 13 58   |
| 30 | 9 13  | 9 42  | 10 12 | 10 43 | 11 16 | 11 51 | 12 27 | 13 5    |
| 31 | 8 34  | 9 1   | 9 28  | 9 58  | 10 29 | 11 1  | 11 35 | 12 11   |
| 32 | 7 54  | 8 18  | 8 44  | 9 12  | 9 40  | 10 10 | 10 42 | 11 15   |



# Residuum Tabule Positionum

| Elevatio | 33    | 34    | 35    | 36    | 37    | 38    | 39    | 40    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32       | 59 43 | 62 20 | 65 2  | 68 51 | 70 49 | 73 55 | 77 43 | 80 41 |
| 31       | 58 45 | 61 19 | 63 58 | 67 44 | 69 39 | 72 42 | 75 56 | 79 21 |
| De       | 30    | 57 48 | 60 19 | 62 56 | 66 39 | 68 31 | 71 31 | 74 41 |
| cli      | 29    | 56 53 | 59 21 | 61 55 | 65 36 | 67 25 | 70 22 | 73 29 |
| na       | 28    | 55 59 | 58 25 | 60 56 | 64 34 | 66 21 | 69 15 | 72 19 |
| no       | 27    | 55 6  | 57 30 | 59 59 | 63 35 | 65 19 | 68 10 | 71 11 |
| Se       | 26    | 54 15 | 56 36 | 59 3  | 61 36 | 64 18 | 67 6  | 70 5  |
| pten     | 25    | 53 25 | 55 44 | 58 8  | 60 39 | 63 18 | 66 3  | 69 0  |
| trio     | 24    | 52 35 | 54 53 | 57 15 | 59 43 | 62 20 | 65 3  | 67 57 |
| na       | 23    | 51 47 | 54 2  | 56 22 | 58 49 | 61 23 | 64 4  | 66 55 |
| hs       | 22    | 51 0  | 53 13 | 55 32 | 57 56 | 60 28 | 63 6  | 65 55 |
| lu       | 21    | 50 13 | 52 24 | 54 41 | 57 3  | 59 33 | 62 9  | 64 56 |
| pra      | 20    | 49 27 | 51 37 | 53 51 | 56 11 | 58 39 | 61 13 | 63 57 |
| ter      | 19    | 48 42 | 50 50 | 53 2  | 55 20 | 57 46 | 60 18 | 63 0  |
| ram      | 18    | 47 58 | 50 4  | 52 14 | 54 30 | 56 54 | 59 24 | 62 4  |
|          | 17    | 47 14 | 49 18 | 51 27 | 53 41 | 56 3  | 58 31 | 61 9  |
| Et       | 16    | 46 31 | 48 33 | 50 40 | 52 53 | 55 13 | 57 39 | 60 15 |
| De       | 15    | 45 48 | 47 49 | 49 54 | 52 5  | 54 23 | 56 47 | 59 21 |
| ri       | 14    | 45 6  | 47 5  | 49 8  | 51 17 | 53 34 | 55 56 | 58 28 |
| di       | 13    | 44 24 | 46 22 | 48 23 | 50 30 | 52 45 | 55 6  | 57 35 |
| ana      | 12    | 43 43 | 45 39 | 47 39 | 49 44 | 51 57 | 54 16 | 56 44 |
| sub      | 11    | 43 2  | 44 56 | 46 54 | 48 58 | 51 9  | 53 26 | 55 52 |
| ter      | 10    | 42 22 | 44 14 | 46 11 | 48 13 | 50 22 | 52 37 | 55 2  |
| ra       | 9     | 41 41 | 43 32 | 45 27 | 47 17 | 49 35 | 51 48 | 54 11 |
|          | 8     | 41 1  | 42 50 | 44 44 | 46 43 | 48 49 | 51 0  | 53 21 |
|          | 7     | 40 21 | 42 9  | 44 1  | 45 58 | 48 3  | 50 12 | 52 31 |
|          | 6     | 39 42 | 41 28 | 43 18 | 45 14 | 47 17 | 49 25 | 51 42 |
|          | 5     | 39 2  | 40 47 | 42 36 | 44 30 | 46 37 | 48 37 | 50 53 |
|          | 4     | 38 23 | 40 6  | 41 53 | 43 46 | 45 45 | 47 50 | 50 4  |
|          | 3     | 37 44 | 39 26 | 41 11 | 43 2  | 45 0  | 47 3  | 49 15 |
|          | 2     | 37 5  | 38 45 | 40 29 | 42 18 | 44 15 | 46 16 | 48 26 |
|          | 1     | 36 26 | 38 4  | 39 47 | 41 35 | 43 29 | 45 29 | 47 38 |
|          | 0     | 35 41 | 37 24 | 39 5  | 40 51 | 42 44 | 44 42 | 46 39 |



# Ad .48. Gradus Latitudinis

|    | 41    | 42    | 43    | 44    | 45     | 46     | 47     | 48 poli |
|----|-------|-------|-------|-------|--------|--------|--------|---------|
| B  | B m   | B m   | B m   | B m   | B m    | B m    | B m    | B m     |
| 32 | 84 25 | 88 29 | 92 44 | 97 31 | 102 53 | 109 7  | 116 59 | 133 57  |
| 31 | 83 0  | 86 55 | 91 11 | 95 52 | 101 9  | 107 17 | 115 2  | 131 55  |
| 30 | 81 38 | 85 29 | 89 41 | 94 17 | 99 29  | 105 31 | 113 10 | 129 53  |
| 29 | 80 19 | 84 7  | 88 14 | 92 46 | 97 53  | 103 50 | 111 23 | 128 0   |
| 28 | 79 2  | 82 46 | 86 50 | 91 18 | 96 20  | 102 13 | 109 41 | 126 12  |
| 27 | 77 48 | 81 28 | 85 28 | 89 53 | 94 51  | 100 39 | 108 2  | 124 28  |
| 26 | 76 56 | 80 13 | 84 9  | 88 30 | 93 24  | 99 8   | 106 27 | 122 48  |
| 25 | 75 26 | 79 0  | 82 53 | 87 10 | 92 1   | 97 40  | 104 55 | 121 12  |
| 24 | 74 17 | 77 48 | 81 38 | 85 52 | 90 39  | 96 18  | 103 26 | 118 38  |
| 23 | 73 10 | 76 38 | 80 25 | 84 36 | 89 20  | 94 53  | 102 0  | 117 8   |
| 22 | 72 5  | 75 30 | 79 14 | 83 22 | 88 3   | 93 32  | 100 35 | 116 40  |
| 21 | 71 1  | 74 23 | 78 5  | 82 10 | 86 47  | 92 13  | 99 13  | 115 14  |
| 20 | 69 58 | 73 18 | 76 56 | 80 59 | 85 34  | 90 56  | 97 53  | 113 51  |
| 19 | 68 56 | 72 14 | 75 50 | 79 49 | 84 22  | 89 41  | 96 35  | 112 29  |
| 18 | 67 55 | 71 11 | 74 44 | 78 41 | 83 11  | 88 28  | 95 18  | 111 9   |
| 17 | 66 56 | 70 9  | 73 40 | 77 34 | 82 1   | 87 15  | 94 3   | 109 51  |
| 16 | 65 57 | 69 8  | 72 37 | 76 29 | 80 53  | 86 4   | 92 49  | 108 34  |
| 15 | 64 59 | 68 8  | 71 34 | 75 24 | 79 45  | 84 55  | 91 37  | 107 19  |
| 14 | 64 2  | 67 8  | 70 33 | 74 20 | 78 39  | 83 46  | 90 25  | 106 5   |
| 13 | 63 6  | 66 10 | 69 32 | 73 17 | 77 34  | 82 38  | 89 15  | 104 51  |
| 12 | 62 10 | 65 12 | 68 32 | 72 15 | 76 29  | 81 31  | 88 6   | 103 39  |
| 11 | 61 12 | 64 15 | 67 33 | 71 13 | 75 26  | 80 25  | 86 57  | 102 28  |
| 10 | 60 20 | 63 18 | 66 34 | 70 12 | 74 22  | 79 19  | 85 49  | 101 18  |
| 9  | 59 26 | 62 22 | 65 36 | 69 12 | 73 20  | 78 14  | 84 42  | 100 8   |
| 8  | 58 32 | 61 26 | 64 38 | 68 12 | 72 18  | 77 10  | 83 35  | 98 59   |
| 7  | 57 39 | 60 31 | 63 40 | 67 13 | 71 16  | 76 6   | 82 29  | 97 50   |
| 6  | 56 46 | 59 36 | 62 43 | 66 14 | 70 15  | 75 3   | 81 23  | 96 42   |
| 5  | 55 53 | 58 41 | 61 47 | 65 15 | 69 14  | 74 0   | 80 18  | 95 35   |
| 4  | 55 0  | 57 47 | 60 50 | 64 16 | 68 14  | 72 57  | 79 13  | 94 27   |
| 3  | 54 8  | 56 52 | 59 54 | 63 18 | 67 13  | 71 55  | 78 8   | 93 20   |
| 2  | 53 15 | 55 58 | 58 58 | 62 20 | 66 13  | 70 52  | 77 4   | 92 13   |
| 1  | 52 23 | 55 4  | 58 2  | 61 22 | 65 13  | 69 50  | 75 59  | 91 7    |
| 0  | 51 31 | 54 10 | 57 6  | 60 24 | 64 13  | 68 48  | 74 55  | 90 0    |

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# Residuum Tabule Positionum

| Elevatio | 33    | 34    | 35    | 36    | 37    | 38    | 39    | 40    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 0        | 35 41 | 37 24 | 39 5  | 40 51 | 42 44 | 44 42 | 46 49 | 49 4  |
| 1        | 35 8  | 36 44 | 38 23 | 40 7  | 41 59 | 43 55 | 46 0  | 48 14 |
| De       | 2     | 34 29 | 36 3  | 37 41 | 39 24 | 41 13 | 43 8  | 45 12 |
| cli      | 3     | 33 50 | 35 22 | 36 59 | 38 40 | 40 28 | 42 21 | 44 23 |
| na       | 4     | 33 11 | 34 42 | 36 17 | 37 56 | 39 43 | 41 34 | 43 34 |
| rio      | 5     | 32 32 | 34 1  | 35 34 | 37 12 | 38 57 | 40 47 | 42 45 |
| De       | 6     | 31 52 | 33 20 | 34 52 | 36 28 | 38 11 | 39 59 | 41 56 |
| ri       | 7     | 31 13 | 32 39 | 34 2  | 35 44 | 37 25 | 39 12 | 41 7  |
| di       | 8     | 30 33 | 31 58 | 33 26 | 34 59 | 36 39 | 38 24 | 40 17 |
| ana      | 9     | 29 53 | 31 16 | 32 43 | 34 15 | 35 53 | 37 36 | 39 27 |
| fu       | 10    | 29 12 | 30 34 | 31 59 | 33 29 | 35 6  | 36 47 | 38 36 |
| pra      | 11    | 28 32 | 29 52 | 31 16 | 32 44 | 34 19 | 35 58 | 37 46 |
| ter      | 12    | 27 51 | 29 9  | 30 31 | 31 58 | 33 31 | 35 8  | 36 54 |
| ram      | 13    | 27 10 | 28 26 | 29 47 | 31 12 | 32 43 | 34 18 | 36 3  |
| Et       | 14    | 26 28 | 27 43 | 29 2  | 30 25 | 31 54 | 33 28 | 35 10 |
| Se       | 15    | 25 46 | 26 59 | 28 16 | 29 37 | 31 5  | 32 37 | 34 17 |
| pten     | 16    | 25 3  | 26 15 | 27 30 | 28 49 | 30 15 | 31 45 | 33 23 |
| rio      | 17    | 24 20 | 25 30 | 26 43 | 28 1  | 29 25 | 30 53 | 32 29 |
| na       | 18    | 23 36 | 24 44 | 25 56 | 27 12 | 28 34 | 30 0  | 31 34 |
| lis      | 19    | 22 52 | 23 58 | 25 8  | 26 22 | 27 42 | 29 6  | 30 38 |
| sub      | 20    | 22 7  | 23 11 | 24 19 | 25 31 | 26 49 | 28 11 | 29 41 |
| ter      | 21    | 21 21 | 22 24 | 23 29 | 24 39 | 25 55 | 27 15 | 28 42 |
| ra       | 22    | 20 34 | 21 35 | 22 38 | 23 46 | 25 0  | 26 18 | 27 43 |
|          | 23    | 19 47 | 20 46 | 21 48 | 22 53 | 24 5  | 25 20 | 26 43 |
|          | 24    | 18 59 | 19 55 | 20 55 | 21 59 | 23 8  | 24 21 | 25 41 |
|          | 25    | 18 9  | 19 4  | 20 2  | 21 3  | 22 10 | 23 21 | 24 38 |
|          | 26    | 17 19 | 18 12 | 19 7  | 20 6  | 21 10 | 22 18 | 23 33 |
|          | 27    | 16 28 | 17 18 | 18 11 | 19 7  | 20 9  | 21 14 | 22 27 |
|          | 28    | 15 35 | 16 23 | 17 14 | 18 8  | 19 7  | 20 9  | 21 19 |
|          | 29    | 14 41 | 15 27 | 16 15 | 17 6  | 18 3  | 19 2  | 20 9  |
|          | 30    | 13 46 | 14 29 | 15 14 | 16 3  | 16 57 | 17 53 | 18 57 |
|          | 31    | 12 49 | 13 29 | 14 12 | 14 58 | 15 49 | 16 42 | 17 42 |
|          | 32    | 11 51 | 12 28 | 13 8  | 13 51 | 14 39 | 15 29 | 16 25 |
|          |       |       |       |       |       |       |       | 17 27 |



Ad .48. Gradus Latitudinis

|    | 41    | 42    | 43    | 44    | 45    | 46    | 47    | 48 poli |
|----|-------|-------|-------|-------|-------|-------|-------|---------|
| B  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m     |
| 0  | 51 31 | 54 10 | 57 6  | 60 24 | 64 13 | 68 48 | 74 55 | 90 0    |
| 1  | 50 39 | 53 16 | 56 10 | 59 26 | 63 13 | 67 46 | 73 51 | 88 53   |
| 2  | 49 47 | 52 22 | 55 14 | 58 28 | 62 13 | 66 44 | 72 46 | 87 47   |
| 3  | 48 54 | 51 28 | 54 18 | 57 30 | 61 13 | 65 41 | 71 42 | 86 40   |
| 4  | 48 2  | 50 25 | 53 22 | 56 32 | 60 12 | 64 30 | 70 37 | 85 33   |
| 5  | 47 9  | 49 39 | 52 25 | 55 33 | 59 12 | 63 36 | 69 32 | 84 25   |
| 6  | 46 16 | 48 44 | 51 29 | 54 34 | 58 11 | 62 33 | 68 27 | 83 18   |
| 7  | 45 23 | 47 49 | 50 32 | 53 35 | 57 10 | 61 30 | 67 21 | 82 10   |
| 8  | 44 30 | 46 54 | 49 34 | 52 36 | 56 8  | 60 26 | 66 15 | 81 1    |
| 9  | 43 36 | 45 58 | 48 36 | 51 36 | 55 6  | 59 22 | 65 8  | 79 52   |
| 10 | 42 42 | 45 22 | 47 38 | 50 36 | 54 4  | 58 17 | 64 1  | 78 42   |
| 11 | 41 47 | 44 5  | 46 39 | 49 35 | 53 0  | 57 11 | 62 53 | 77 32   |
| 12 | 40 52 | 43 8  | 45 40 | 48 33 | 51 57 | 56 5  | 61 44 | 76 21   |
| 13 | 39 56 | 42 10 | 44 40 | 47 31 | 50 52 | 54 58 | 60 35 | 75 9    |
| 14 | 39 0  | 41 12 | 43 39 | 46 28 | 49 47 | 53 50 | 59 25 | 73 55   |
| 15 | 38 3  | 40 12 | 42 38 | 45 24 | 48 41 | 52 41 | 58 13 | 72 41   |
| 16 | 37 5  | 39 12 | 41 35 | 44 19 | 47 33 | 51 32 | 57 1  | 71 26   |
| 17 | 36 6  | 38 11 | 40 32 | 43 14 | 46 25 | 50 21 | 55 47 | 70 9    |
| 18 | 35 7  | 37 9  | 39 28 | 42 7  | 45 15 | 49 8  | 54 32 | 68 51   |
| 19 | 34 6  | 36 6  | 38 22 | 40 59 | 44 4  | 47 55 | 53 15 | 67 31   |
| 20 | 33 4  | 35 2  | 37 16 | 39 49 | 42 52 | 46 40 | 51 57 | 66 9    |
| 21 | 32 1  | 33 57 | 36 7  | 38 38 | 41 39 | 45 23 | 50 37 | 64 46   |
| 22 | 30 57 | 32 50 | 34 58 | 37 26 | 40 23 | 44 4  | 49 15 | 63 20   |
| 23 | 29 52 | 31 42 | 33 47 | 36 12 | 39 6  | 42 43 | 47 50 | 61 52   |
| 24 | 28 45 | 30 32 | 32 34 | 34 56 | 37 47 | 41 21 | 46 24 | 60 22   |
| 25 | 27 36 | 29 20 | 31 19 | 33 38 | 36 25 | 39 56 | 44 55 | 58 48   |
| 26 | 26 26 | 28 2  | 30 3  | 32 18 | 35 2  | 38 28 | 43 23 | 57 12   |
| 27 | 25 14 | 26 52 | 28 44 | 30 55 | 33 35 | 36 57 | 41 48 | 55 32   |
| 28 | 24 0  | 25 34 | 27 22 | 29 30 | 32 6  | 35 23 | 40 9  | 53 48   |
| 29 | 22 43 | 24 13 | 25 58 | 28 2  | 30 33 | 33 46 | 38 27 | 52 0    |
| 30 | 21 24 | 22 51 | 24 31 | 26 31 | 28 57 | 32 5  | 36 40 | 50 7    |
| 31 | 20 2  | 21 25 | 23 1  | 24 56 | 27 17 | 30 19 | 34 48 | 48 8    |
| 32 | 18 37 | 19 56 | 21 28 | 23 17 | 25 33 | 28 29 | 32 51 | 46 3    |

DD 2



# Tabula Positionum

| Elevatio | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8     |
|----------|------|------|------|------|------|------|------|-------|
|          | B    | B m  | B m  | B m  | B m  | B m  | B m  | B m   |
| 32       | 1 26 | 2 52 | 4 19 | 5 45 | 7 12 | 8 39 | 10 6 | 11 34 |
| 31       | 1 25 | 2 49 | 4 14 | 5 39 | 7 5  | 8 30 | 9 56 | 11 23 |
| De       | 30   | 1 24 | 2 46 | 4 10 | 5 34 | 6 58 | 8 22 | 9 46  |
| cli      | 29   | 1 22 | 2 44 | 4 6  | 5 28 | 6 51 | 8 13 | 9 36  |
| na       | 28   | 1 21 | 2 41 | 4 2  | 5 23 | 6 44 | 8 5  | 9 27  |
| tio      | 27   | 1 20 | 2 38 | 3 58 | 5 18 | 6 37 | 7 57 | 9 17  |
| Se       | 26   | 1 18 | 2 36 | 3 54 | 5 12 | 6 31 | 7 49 | 9 8   |
| pten     | 25   | 1 17 | 2 33 | 3 50 | 5 7  | 6 24 | 7 42 | 8 59  |
| trio     | 24   | 1 16 | 2 30 | 3 46 | 5 2  | 6 18 | 7 34 | 8 50  |
| na       | 23   | 1 14 | 2 28 | 3 43 | 4 57 | 6 12 | 7 26 | 8 41  |
| lis      | 22   | 1 13 | 2 26 | 3 39 | 4 52 | 6 6  | 7 19 | 8 33  |
| fu       | 21   | 1 12 | 2 23 | 3 35 | 4 47 | 5 59 | 7 12 | 8 24  |
| pa       | 20   | 1 11 | 2 21 | 3 32 | 4 42 | 5 53 | 7 5  | 8 16  |
| ter      | 19   | 1 10 | 2 18 | 3 28 | 4 38 | 5 48 | 6 57 | 8 7   |
| ram      | 18   | 1 8  | 2 16 | 3 25 | 4 33 | 5 42 | 6 50 | 7 59  |
|          | 17   | 1 7  | 2 14 | 3 21 | 4 29 | 5 36 | 6 43 | 7 51  |
| Et       | 16   | 1 6  | 2 11 | 3 18 | 4 24 | 5 30 | 6 37 | 7 43  |
| Me       | 15   | 1 5  | 2 9  | 3 14 | 4 19 | 5 25 | 6 30 | 7 35  |
| ri       | 14   | 1 4  | 2 7  | 3 11 | 4 15 | 5 19 | 6 23 | 7 27  |
| di       | 13   | 1 3  | 2 5  | 3 8  | 4 11 | 5 13 | 6 16 | 7 19  |
| ana      | 12   | 1 2  | 2 2  | 3 4  | 4 6  | 5 8  | 6 10 | 7 12  |
| sub      | 11   | 1 1  | 2 0  | 3 1  | 4 2  | 5 2  | 6 3  | 7 4   |
| ter      | 10   | 1 0  | 1 58 | 2 53 | 3 57 | 4 57 | 5 57 | 6 56  |
| ra       | 9    | 0 58 | 1 56 | 2 55 | 3 53 | 4 52 | 5 50 | 6 49  |
|          | 8    | 0 57 | 1 54 | 2 51 | 3 49 | 4 46 | 5 44 | 6 41  |
|          | 7    | 0 56 | 1 52 | 2 48 | 3 45 | 4 41 | 5 37 | 6 34  |
|          | 6    | 0 55 | 1 50 | 2 45 | 3 40 | 4 36 | 5 31 | 6 26  |
|          | 5    | 0 54 | 1 47 | 2 42 | 3 36 | 4 30 | 5 25 | 6 19  |
|          | 4    | 0 53 | 1 45 | 2 39 | 3 32 | 4 25 | 5 18 | 6 12  |
|          | 3    | 0 52 | 1 43 | 2 35 | 3 28 | 4 20 | 5 12 | 6 4   |
|          | 2    | 0 51 | 1 41 | 2 32 | 3 23 | 4 14 | 5 6  | 5 57  |
|          | 1    | 0 50 | 1 39 | 2 29 | 3 19 | 4 9  | 4 59 | 5 49  |
|          | 0    | 0 49 | 1 37 | 2 26 | 3 15 | 4 4  | 4 53 | 5 42  |
|          |      |      |      |      |      |      |      | 6 32  |



# Ad .51. Gradus Latitudinis

| Poli | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| B m  | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32   | 13 3  | 14 23 | 16 2  | 17 33 | 19 4  | 20 37 | 22 10 | 23 45 | 25 21 |
| 31   | 12 50 | 14 18 | 15 45 | 17 15 | 18 44 | 20 16 | 21 48 | 23 21 | 24 55 |
| 30   | 12 37 | 14 4  | 15 30 | 16 58 | 18 26 | 19 56 | 21 26 | 22 58 | 24 30 |
| 29   | 12 24 | 13 50 | 15 14 | 16 41 | 18 7  | 19 36 | 21 4  | 22 35 | 24 5  |
| 28   | 12 12 | 13 36 | 14 59 | 16 24 | 17 49 | 19 16 | 20 43 | 22 12 | 23 41 |
| 27   | 12 0  | 13 22 | 14 44 | 16 8  | 17 31 | 18 57 | 20 23 | 21 50 | 23 18 |
| 26   | 11 48 | 13 9  | 14 29 | 15 52 | 17 14 | 18 38 | 20 3  | 21 28 | 22 55 |
| 25   | 11 36 | 12 56 | 14 15 | 15 36 | 16 57 | 18 20 | 19 43 | 21 7  | 22 32 |
| 24   | 11 25 | 12 43 | 14 1  | 15 21 | 16 40 | 18 1  | 19 23 | 20 46 | 22 9  |
| 23   | 11 13 | 12 31 | 13 47 | 15 6  | 16 23 | 17 44 | 19 4  | 20 25 | 21 47 |
| 22   | 11 2  | 12 18 | 13 33 | 14 51 | 16 7  | 17 26 | 18 45 | 20 5  | 21 26 |
| 21   | 10 51 | 12 6  | 13 20 | 14 36 | 15 51 | 17 9  | 18 26 | 19 45 | 21 4  |
| 20   | 10 40 | 11 54 | 13 6  | 14 21 | 15 35 | 16 51 | 18 8  | 19 25 | 20 43 |
| 19   | 10 30 | 11 42 | 12 53 | 14 0  | 15 20 | 16 34 | 17 50 | 19 6  | 20 23 |
| 18   | 10 19 | 11 30 | 12 40 | 13 53 | 15 4  | 16 18 | 17 32 | 18 47 | 20 2  |
| 17   | 10 9  | 11 18 | 12 27 | 13 39 | 14 49 | 16 1  | 17 14 | 18 28 | 19 42 |
| 16   | 9 58  | 11 7  | 12 15 | 13 25 | 14 39 | 15 45 | 16 56 | 18 9  | 19 22 |
| 15   | 9 48  | 10 55 | 12 2  | 13 11 | 14 19 | 15 29 | 16 39 | 17 50 | 19 2  |
| 14   | 9 38  | 10 44 | 11 50 | 12 57 | 14 4  | 15 13 | 16 22 | 17 32 | 18 42 |
| 13   | 9 28  | 10 33 | 11 37 | 12 44 | 13 49 | 14 57 | 16 5  | 17 14 | 18 23 |
| 12   | 9 18  | 10 22 | 11 25 | 12 30 | 13 35 | 14 41 | 15 48 | 16 56 | 18 4  |
| 11   | 9 8   | 10 11 | 11 13 | 12 17 | 13 20 | 14 26 | 15 31 | 16 38 | 17 44 |
| 10   | 8 58  | 10 0  | 11 1  | 12 4  | 13 6  | 14 10 | 15 14 | 16 20 | 17 25 |
| 9    | 8 48  | 9 49  | 10 49 | 11 51 | 12 52 | 13 55 | 14 58 | 16 2  | 17 7  |
| 8    | 8 38  | 9 38  | 10 37 | 11 38 | 12 38 | 13 39 | 14 41 | 15 45 | 16 48 |
| 7    | 8 29  | 9 27  | 10 25 | 11 25 | 12 23 | 13 24 | 14 25 | 15 27 | 16 29 |
| 6    | 8 19  | 9 17  | 10 13 | 11 12 | 12 9  | 13 9  | 14 9  | 15 10 | 16 10 |
| 5    | 8 10  | 9 6   | 10 1  | 10 59 | 11 55 | 12 54 | 13 53 | 14 52 | 15 52 |
| 4    | 8 0   | 8 55  | 9 50  | 10 46 | 11 42 | 12 39 | 13 36 | 14 35 | 15 34 |
| 3    | 7 51  | 8 45  | 9 38  | 10 33 | 11 28 | 12 24 | 13 20 | 14 18 | 15 15 |
| 2    | 7 41  | 8 34  | 9 26  | 10 20 | 11 14 | 12 9  | 13 4  | 14 0  | 14 57 |
| 1    | 7 31  | 8 24  | 9 15  | 10 8  | 11 0  | 11 54 | 12 48 | 13 43 | 14 38 |
| 0    | 7 22  | 8 13  | 9 3   | 9 55  | 10 46 | 11 39 | 12 32 | 13 26 | 14 20 |

DD 3



# Tabula Positionum

| Elevatio | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|----------|------|------|------|------|------|------|------|------|
| S        | S m  | S m  | S m  | S m  | S m  | S m  | S m  | S m  |
| 0        | 0 49 | 1 37 | 2 26 | 3 15 | 4 4  | 4 53 | 5 42 | 6 32 |
| 1        | 0 48 | 1 35 | 2 23 | 3 11 | 3 59 | 4 47 | 5 35 | 6 24 |
| De       | 2    | 0 47 | 1 33 | 2 20 | 3 7  | 3 54 | 4 40 | 5 27 |
| cli      | 3    | 0 46 | 1 31 | 2 17 | 3 2  | 3 48 | 4 34 | 5 20 |
| na       | 4    | 0 45 | 1 29 | 2 13 | 2 58 | 3 43 | 4 29 | 5 12 |
| tio      | 5    | 0 44 | 1 27 | 2 10 | 2 54 | 3 38 | 4 21 | 5 5  |
| 2 De     | 6    | 0 43 | 1 24 | 2 7  | 2 50 | 3 32 | 4 15 | 4 58 |
| ri       | 7    | 0 42 | 1 22 | 2 4  | 2 45 | 3 27 | 4 9  | 4 52 |
| di       | 8    | 0 41 | 1 20 | 2 1  | 2 41 | 3 22 | 4 2  | 4 43 |
| ana      | 9    | 0 40 | 1 18 | 1 57 | 2 37 | 3 16 | 3 56 | 4 35 |
| su       | 10   | 0 38 | 1 16 | 1 54 | 2 33 | 3 11 | 3 49 | 4 28 |
| pra      | 11   | 0 37 | 1 14 | 1 51 | 2 28 | 3 6  | 3 43 | 4 20 |
| ter      | 12   | 0 36 | 1 12 | 1 48 | 2 24 | 3 0  | 3 36 | 4 12 |
| ram      | 13   | 0 35 | 1 9  | 1 44 | 2 19 | 2 55 | 3 30 | 4 5  |
| 14       | 0 34 | 1 7  | 1 41 | 2 15 | 2 49 | 3 23 | 3 57 | 4 32 |
| Et       | 15   | 0 33 | 1 5  | 1 38 | 2 11 | 2 43 | 3 16 | 3 49 |
| Se       | 16   | 0 32 | 1 3  | 1 34 | 2 6  | 2 38 | 3 9  | 3 41 |
| pten     | 17   | 0 31 | 1 0  | 1 31 | 2 1  | 2 32 | 3 3  | 3 33 |
| trio     | 18   | 0 30 | 0 58 | 1 27 | 1 57 | 2 26 | 2 56 | 3 25 |
| na       | 19   | 0 28 | 0 56 | 1 24 | 1 52 | 2 20 | 2 49 | 3 17 |
| lis      | 20   | 0 27 | 0 53 | 1 20 | 1 48 | 2 15 | 2 41 | 3 8  |
| sub      | 21   | 0 26 | 0 51 | 1 17 | 1 43 | 2 9  | 2 34 | 3 0  |
| ter      | 22   | 0 25 | 0 48 | 1 13 | 1 38 | 2 2  | 2 27 | 2 51 |
| ra       | 23   | 0 24 | 0 46 | 1 9  | 1 33 | 1 56 | 2 20 | 2 43 |
| 24       | 0 22 | 0 44 | 1 6  | 1 28 | 1 50 | 2 12 | 2 34 | 2 57 |
| 25       | 0 31 | 0 41 | 1 2  | 1 23 | 1 44 | 2 4  | 2 25 | 2 47 |
| 26       | 0 20 | 0 38 | 0 58 | 1 18 | 1 37 | 1 57 | 2 6  | 2 36 |
| 27       | 0 18 | 0 36 | 0 54 | 1 12 | 1 31 | 1 49 | 1 2  | 2 26 |
| 28       | 0 17 | 0 33 | 0 50 | 1 7  | 1 24 | 1 41 | 1 57 | 2 15 |
| 29       | 0 16 | 0 30 | 0 46 | 1 2  | 1 17 | 1 33 | 1 48 | 2 4  |
| 30       | 0 14 | 0 28 | 0 42 | 0 56 | 1 10 | 1 24 | 1 38 | 1 53 |
| 31       | 0 13 | 0 25 | 0 38 | 0 51 | 1 3  | 1 16 | 1 28 | 1 41 |
| 32       | 0 12 | 0 22 | 0 33 | 0 45 | 0 56 | 1 7  | 1 18 | 1 30 |



Ad .51. Gradus Latitudinis

| Poli | 9    | 10   | 11   | 12   | 13    | 14    | 15    | 16    | 17    |
|------|------|------|------|------|-------|-------|-------|-------|-------|
| S    | S m  | S m  | S m  | S m  | S m   | S m   | S m   | S m   | S m   |
| 0    | 7 22 | 8 13 | 9 3  | 9 55 | 10 46 | 11 39 | 12 32 | 13 26 | 14 20 |
| 1    | 7 13 | 8 2  | 8 51 | 9 42 | 10 32 | 11 24 | 12 16 | 13 9  | 14 2  |
| 2    | 7 3  | 7 52 | 8 40 | 9 30 | 10 18 | 11 9  | 12 0  | 12 52 | 13 43 |
| 3    | 6 53 | 7 41 | 8 28 | 9 17 | 10 4  | 10 54 | 11 44 | 12 34 | 13 25 |
| 4    | 6 44 | 7 31 | 8 16 | 9 4  | 9 50  | 10 39 | 11 38 | 12 17 | 13 6  |
| 5    | 6 34 | 7 21 | 8 5  | 8 51 | 9 37  | 10 24 | 11 11 | 12 0  | 12 48 |
| 6    | 6 25 | 7 9  | 7 53 | 8 38 | 9 23  | 10 9  | 10 55 | 11 42 | 12 30 |
| 7    | 6 15 | 6 59 | 7 41 | 8 25 | 9 9   | 9 54  | 10 39 | 11 25 | 12 11 |
| 8    | 6 6  | 6 48 | 7 29 | 8 12 | 8 54  | 9 39  | 10 23 | 11 7  | 11 52 |
| 9    | 5 56 | 6 37 | 7 17 | 7 59 | 8 40  | 9 23  | 10 6  | 10 50 | 11 33 |
| 10   | 5 46 | 6 26 | 7 7  | 7 46 | 8 26  | 9 8   | 9 50  | 10 32 | 11 15 |
| 11   | 5 36 | 6 15 | 6 53 | 7 33 | 8 12  | 8 52  | 9 33  | 10 14 | 10 56 |
| 12   | 5 26 | 6 4  | 6 41 | 7 20 | 7 57  | 8 37  | 9 16  | 9 56  | 10 36 |
| 13   | 5 16 | 5 53 | 6 29 | 7 6  | 7 43  | 8 21  | 8 59  | 9 38  | 10 17 |
| 14   | 5 6  | 5 42 | 6 16 | 6 53 | 7 28  | 8 5   | 8 42  | 9 20  | 9 58  |
| 15   | 4 56 | 5 31 | 6 4  | 6 39 | 7 13  | 7 49  | 8 25  | 9 2   | 9 38  |
| 16   | 4 46 | 5 19 | 5 51 | 6 25 | 6 58  | 7 33  | 8 8   | 8 43  | 9 18  |
| 17   | 4 35 | 5 8  | 5 39 | 6 11 | 6 43  | 7 17  | 7 50  | 8 24  | 8 58  |
| 18   | 4 25 | 4 56 | 5 26 | 5 53 | 6 28  | 7 0   | 7 32  | 8 5   | 8 38  |
| 19   | 4 14 | 4 44 | 5 13 | 5 43 | 6 12  | 6 44  | 7 14  | 7 46  | 8 17  |
| 20   | 4 4  | 4 32 | 5 0  | 5 29 | 5 57  | 6 27  | 6 56  | 7 27  | 7 57  |
| 21   | 3 53 | 4 20 | 4 46 | 5 14 | 5 41  | 6 9   | 6 38  | 7 7   | 7 36  |
| 22   | 3 42 | 4 8  | 4 33 | 4 59 | 5 25  | 5 52  | 6 19  | 6 47  | 7 14  |
| 23   | 3 31 | 3 55 | 4 19 | 4 44 | 5 9   | 5 34  | 6 0   | 6 21  | 6 53  |
| 24   | 3 19 | 3 43 | 4 5  | 4 29 | 4 52  | 5 17  | 5 41  | 6 6   | 6 31  |
| 25   | 3 8  | 3 33 | 3 51 | 4 14 | 4 35  | 4 58  | 5 21  | 5 45  | 6 8   |
| 26   | 2 56 | 3 17 | 3 37 | 3 58 | 4 18  | 4 40  | 5 1   | 5 24  | 5 45  |
| 27   | 2 44 | 3 4  | 3 22 | 3 42 | 4 1   | 4 21  | 4 41  | 5 2   | 5 22  |
| 28   | 2 32 | 2 50 | 3 7  | 3 26 | 3 43  | 4 2   | 4 21  | 4 46  | 4 59  |
| 29   | 2 20 | 2 36 | 2 52 | 3 9  | 3 25  | 3 42  | 4 0   | 4 17  | 4 35  |
| 30   | 2 7  | 2 22 | 2 36 | 2 52 | 3 6   | 3 22  | 3 38  | 3 54  | 4 10  |
| 31   | 1 54 | 2 8  | 2 21 | 2 35 | 2 48  | 3 2   | 3 16  | 3 31  | 3 45  |
| 32   | 1 41 | 1 53 | 2 4  | 2 17 | 2 28  | 2 41  | 2 54  | 3 7   | 3 19  |



# Residuum Tabule Positionum

| Elevatio | 18 | 19    | 20    | 21    | 22    | 23    | 24    | 25    |
|----------|----|-------|-------|-------|-------|-------|-------|-------|
|          | S  | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
|          | 32 | 26 58 | 28 36 | 30 17 | 32 0  | 33 43 | 35 29 | 37 17 |
|          | 31 | 26 31 | 28 7  | 29 46 | 31 27 | 33 9  | 34 53 | 36 39 |
| De       | 30 | 26 4  | 27 39 | 29 16 | 30 55 | 32 35 | 34 17 | 36 2  |
| cli      | 29 | 25 38 | 27 11 | 28 46 | 30 24 | 32 2  | 33 43 | 35 25 |
| na       | 28 | 25 12 | 26 44 | 28 17 | 29 54 | 31 30 | 33 9  | 34 50 |
| tio      | 27 | 24 47 | 26 17 | 27 49 | 29 24 | 30 59 | 32 35 | 34 15 |
| Se       | 26 | 24 22 | 25 51 | 27 22 | 28 54 | 30 29 | 32 3  | 33 41 |
| pten     | 25 | 23 58 | 25 25 | 26 54 | 28 26 | 29 58 | 31 31 | 33 7  |
| trio     | 24 | 23 34 | 25 0  | 26 27 | 27 57 | 29 28 | 31 0  | 32 34 |
| na       | 23 | 23 11 | 24 35 | 26 1  | 27 29 | 28 59 | 30 29 | 32 2  |
| lis      | 22 | 22 48 | 24 11 | 25 35 | 27 2  | 28 30 | 29 59 | 31 30 |
| fu       | 21 | 22 25 | 23 47 | 25 10 | 26 35 | 28 1  | 29 29 | 30 58 |
| pra      | 20 | 22 3  | 23 33 | 24 45 | 26 9  | 27 33 | 28 59 | 30 27 |
| ter      | 19 | 21 40 | 23 0  | 24 20 | 25 43 | 27 6  | 28 30 | 29 57 |
| ram      | 18 | 21 19 | 22 36 | 23 55 | 25 17 | 26 39 | 28 2  | 29 27 |
|          | 17 | 20 57 | 22 13 | 23 31 | 24 51 | 26 12 | 27 33 | 28 57 |
| Et       | 16 | 20 36 | 21 51 | 23 7  | 24 26 | 25 45 | 27 5  | 28 28 |
| De       | 15 | 20 15 | 21 29 | 22 44 | 24 1  | 25 19 | 26 38 | 27 59 |
| ri       | 14 | 19 54 | 21 6  | 22 20 | 23 37 | 24 53 | 26 11 | 27 30 |
| di       | 13 | 19 33 | 20 45 | 21 57 | 23 12 | 24 27 | 25 44 | 27 2  |
| ana      | 12 | 19 13 | 20 33 | 21 34 | 22 48 | 24 2  | 25 17 | 26 34 |
| sub      | 11 | 18 52 | 20 1  | 21 11 | 22 24 | 23 36 | 24 50 | 26 6  |
| ter      | 10 | 18 32 | 19 40 | 20 49 | 22 0  | 23 11 | 24 22 | 25 38 |
| ra       | 9  | 18 12 | 19 19 | 20 26 | 21 36 | 22 46 | 23 57 | 25 11 |
|          | 8  | 17 52 | 18 57 | 20 4  | 21 13 | 22 21 | 23 41 | 24 43 |
|          | 7  | 17 32 | 18 36 | 19 42 | 20 49 | 21 57 | 23 5  | 24 16 |
|          | 6  | 17 12 | 18 15 | 19 20 | 20 26 | 21 32 | 22 39 | 23 49 |
|          | 5  | 16 53 | 17 55 | 18 57 | 20 2  | 21 8  | 22 14 | 23 22 |
|          | 4  | 16 33 | 17 34 | 18 35 | 19 39 | 20 43 | 21 48 | 22 55 |
|          | 3  | 16 14 | 17 13 | 18 14 | 19 16 | 20 19 | 21 23 | 22 28 |
|          | 2  | 15 54 | 16 52 | 17 52 | 18 53 | 19 55 | 21 57 | 22 1  |
|          | 1  | 15 34 | 16 32 | 17 30 | 18 30 | 19 30 | 20 31 | 21 35 |
|          | 0  | 15 15 | 16 11 | 17 8  | 18 7  | 19 6  | 20 6  | 21 8  |



Ad .51. Gradus Latitudinis

| Poli | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| S    | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 32   | 41 1  | 42 56 | 44 54 | 46 56 | 49 1  | 51 10 | 53 23 | 55 40 | 58 2  |
| 31   | 40 18 | 42 12 | 44 8  | 46 7  | 48 10 | 50 17 | 52 27 | 54 42 | 56 59 |
| 30   | 39 37 | 41 28 | 43 23 | 45 20 | 47 20 | 49 25 | 51 33 | 53 45 | 56 1  |
| 29   | 38 57 | 40 46 | 42 38 | 44 34 | 46 32 | 48 34 | 50 40 | 52 50 | 55 3  |
| 28   | 38 18 | 40 5  | 41 55 | 43 48 | 45 45 | 47 45 | 49 48 | 51 56 | 54 7  |
| 27   | 37 39 | 39 25 | 41 13 | 43 4  | 44 58 | 46 57 | 48 58 | 51 3  | 53 12 |
| 26   | 37 2  | 38 45 | 40 32 | 42 21 | 44 13 | 46 9  | 48 9  | 50 12 | 52 18 |
| 25   | 36 25 | 38 7  | 39 51 | 41 39 | 43 29 | 45 23 | 47 20 | 49 22 | 51 26 |
| 24   | 35 49 | 37 29 | 39 12 | 40 57 | 42 46 | 44 38 | 46 33 | 48 32 | 50 35 |
| 23   | 35 13 | 36 41 | 38 33 | 40 17 | 42 3  | 43 54 | 45 47 | 47 44 | 49 44 |
| 22   | 34 38 | 36 15 | 37 54 | 39 36 | 41 21 | 43 10 | 45 1  | 46 57 | 48 55 |
| 21   | 34 3  | 35 39 | 37 16 | 38 57 | 40 40 | 42 27 | 44 17 | 46 10 | 48 6  |
| 20   | 33 30 | 35 3  | 36 39 | 38 18 | 40 0  | 41 45 | 43 33 | 45 24 | 47 19 |
| 19   | 32 56 | 34 28 | 36 3  | 37 40 | 39 20 | 41 3  | 42 49 | 44 34 | 46 32 |
| 18   | 32 23 | 33 54 | 35 27 | 37 3  | 38 41 | 40 23 | 42 7  | 43 55 | 45 46 |
| 17   | 31 51 | 33 20 | 34 51 | 36 25 | 38 2  | 39 42 | 41 25 | 43 11 | 45 0  |
| 16   | 31 19 | 32 46 | 34 16 | 35 48 | 37 24 | 39 2  | 40 43 | 42 28 | 44 15 |
| 15   | 30 47 | 32 13 | 33 41 | 35 12 | 36 46 | 38 23 | 40 2  | 41 45 | 43 31 |
| 14   | 30 15 | 31 40 | 33 4  | 34 36 | 36 9  | 37 44 | 39 22 | 41 3  | 42 47 |
| 13   | 29 44 | 31 7  | 32 33 | 34 1  | 35 32 | 37 5  | 38 42 | 40 21 | 42 4  |
| 12   | 29 13 | 30 35 | 31 59 | 33 26 | 34 55 | 36 27 | 38 2  | 39 40 | 41 21 |
| 11   | 28 42 | 30 3  | 31 26 | 32 51 | 34 19 | 35 49 | 37 23 | 38 59 | 40 38 |
| 10   | 28 12 | 29 31 | 30 53 | 32 17 | 33 43 | 35 12 | 36 44 | 38 19 | 39 56 |
| 9    | 27 42 | 29 0  | 30 20 | 31 42 | 33 7  | 34 35 | 36 5  | 37 38 | 39 14 |
| 8    | 27 12 | 28 28 | 29 47 | 31 8  | 32 31 | 33 58 | 35 26 | 36 58 | 38 32 |
| 7    | 26 42 | 27 57 | 29 15 | 30 34 | 31 56 | 33 21 | 34 48 | 36 18 | 37 51 |
| 6    | 26 12 | 27 26 | 28 42 | 30 0  | 31 21 | 32 44 | 34 10 | 35 39 | 37 10 |
| 5    | 25 43 | 26 55 | 28 10 | 29 27 | 30 46 | 32 8  | 33 32 | 34 59 | 36 29 |
| 4    | 25 13 | 26 25 | 27 38 | 28 53 | 30 11 | 31 31 | 32 54 | 34 20 | 35 48 |
| 3    | 24 44 | 25 54 | 27 6  | 28 20 | 29 36 | 30 55 | 32 17 | 33 41 | 35 8  |
| 2    | 24 15 | 25 23 | 26 34 | 27 47 | 29 1  | 30 19 | 31 39 | 33 2  | 34 27 |
| 1    | 23 45 | 24 53 | 26 2  | 27 13 | 28 27 | 29 43 | 31 1  | 32 23 | 33 46 |
| 0    | 23 16 | 24 22 | 25 30 | 26 40 | 27 52 | 29 7  | 30 24 | 31 44 | 33 6  |



Residuum Tabule Positionum

| Latitudo | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| S        | S m   | S m   | S m   | S m   | S m   | S m   | S m   | S m   |
| 0        | 15 15 | 16 11 | 17 8  | 18 7  | 19 6  | 20 6  | 21 8  | 22 11 |
| 1        | 14 56 | 15 50 | 16 46 | 17 44 | 18 42 | 19 41 | 20 41 | 21 43 |
| De       | 2     | 14 36 | 15 30 | 16 24 | 17 21 | 18 17 | 19 15 | 20 15 |
| cli      | 3     | 14 16 | 15 9  | 16 2  | 16 58 | 17 53 | 18 49 | 19 48 |
| na       | 4     | 13 57 | 14 48 | 15 41 | 16 35 | 17 29 | 18 24 | 19 21 |
| tio      | 5     | 13 37 | 14 27 | 15 19 | 16 12 | 17 4  | 17 58 | 18 54 |
| Me       | 6     | 13 18 | 14 7  | 14 56 | 15 48 | 16 40 | 17 33 | 18 27 |
| ri       | 7     | 12 58 | 13 46 | 14 34 | 15 25 | 16 15 | 17 7  | 18 0  |
| di       | 8     | 12 38 | 13 25 | 14 12 | 15 1  | 15 51 | 16 41 | 17 33 |
| ana      | 9     | 12 18 | 13 3  | 13 50 | 14 38 | 15 26 | 16 15 | 17 5  |
| su       | 10    | 11 58 | 12 42 | 13 27 | 14 14 | 15 1  | 15 48 | 16 38 |
| pra      | 11    | 11 38 | 12 21 | 13 5  | 13 50 | 14 36 | 15 22 | 16 10 |
| ter      | 12    | 11 17 | 11 59 | 12 42 | 13 26 | 14 10 | 14 55 | 15 42 |
| ram      | 13    | 10 57 | 11 31 | 12 19 | 13 2  | 13 45 | 14 28 | 15 14 |
|          | 14    | 10 36 | 11 16 | 11 56 | 12 37 | 13 19 | 14 1  | 14 46 |
| Et       | 15    | 10 15 | 10 53 | 11 32 | 12 13 | 12 53 | 13 34 | 14 17 |
| Se       | 16    | 9 55  | 10 31 | 11 9  | 11 48 | 12 27 | 13 7  | 13 48 |
| pten     | 17    | 9 33  | 10 9  | 10 45 | 11 23 | 12 0  | 12 39 | 13 19 |
| trio     | 18    | 9 11  | 9 46  | 10 21 | 10 57 | 11 33 | 12 10 | 12 49 |
| na       | 19    | 8 55  | 9 22  | 9 56  | 10 31 | 11 6  | 11 42 | 12 19 |
| lis      | 20    | 8 28  | 8 59  | 9 31  | 10 5  | 10 39 | 11 13 | 11 49 |
| sub      | 21    | 8 5   | 8 35  | 9 6   | 9 39  | 10 11 | 10 43 | 11 18 |
| ter      | 22    | 7 42  | 8 11  | 8 41  | 9 12  | 9 42  | 10 13 | 10 49 |
| ra       | 23    | 7 19  | 7 47  | 8 15  | 8 45  | 9 13  | 9 43  | 10 14 |
|          | 24    | 6 56  | 7 22  | 7 49  | 8 17  | 8 44  | 9 12  | 9 42  |
|          | 25    | 6 32  | 6 57  | 7 22  | 7 48  | 8 14  | 8 41  | 9 9   |
|          | 26    | 6 8   | 6 31  | 6 54  | 7 20  | 7 44  | 8 9   | 8 35  |
|          | 27    | 5 43  | 6 5   | 6 27  | 6 50  | 7 13  | 7 37  | 8 1   |
|          | 28    | 5 18  | 5 38  | 5 59  | 6 20  | 6 42  | 7 3   | 7 26  |
|          | 29    | 4 52  | 5 11  | 5 30  | 5 50  | 6 10  | 6 29  | 6 51  |
|          | 30    | 4 26  | 4 43  | 5 0   | 5 19  | 5 37  | 5 55  | 6 14  |
|          | 31    | 3 59  | 4 15  | 4 30  | 4 47  | 5 3   | 5 19  | 5 37  |
|          | 32    | 3 32  | 3 46  | 3 59  | 4 14  | 4 29  | 4 43  | 4 59  |



Ad .51. Gradus Latitudinis

| Poli | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| B    | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 0    | 23 16 | 24 22 | 25 30 | 26 40 | 27 52 | 29 7  | 30 24 | 31 44 | 33 6  |
| 1    | 22 47 | 23 51 | 24 58 | 26 7  | 27 17 | 28 31 | 29 47 | 31 5  | 32 26 |
| 2    | 22 17 | 23 21 | 24 26 | 25 37 | 26 43 | 27 55 | 29 9  | 30 26 | 31 45 |
| 3    | 21 48 | 22 50 | 23 54 | 25 0  | 26 8  | 27 19 | 28 31 | 29 47 | 31 4  |
| 4    | 21 19 | 22 19 | 23 22 | 24 27 | 25 33 | 26 43 | 27 54 | 29 8  | 30 24 |
| 5    | 20 49 | 21 49 | 22 50 | 23 53 | 24 58 | 26 6  | 27 16 | 28 29 | 29 43 |
| 6    | 20 20 | 21 18 | 22 18 | 23 20 | 24 23 | 25 30 | 26 38 | 27 49 | 29 2  |
| 7    | 19 50 | 20 47 | 21 45 | 22 46 | 23 48 | 24 53 | 26 0  | 27 10 | 28 21 |
| 8    | 19 20 | 20 16 | 21 13 | 22 12 | 23 13 | 24 16 | 25 22 | 26 30 | 27 40 |
| 9    | 18 50 | 19 44 | 20 40 | 21 38 | 22 37 | 23 39 | 24 43 | 25 48 | 26 58 |
| 10   | 18 20 | 19 13 | 20 7  | 21 3  | 22 1  | 23 2  | 24 4  | 25 9  | 26 16 |
| 11   | 17 50 | 18 41 | 19 34 | 20 29 | 21 25 | 22 25 | 23 25 | 24 38 | 25 34 |
| 12   | 17 19 | 18 9  | 19 1  | 19 54 | 20 49 | 21 47 | 22 46 | 23 48 | 24 51 |
| 13   | 16 48 | 17 37 | 18 27 | 19 19 | 20 12 | 21 9  | 22 6  | 23 7  | 24 8  |
| 14   | 16 17 | 17 4  | 17 53 | 18 44 | 19 35 | 20 30 | 21 26 | 22 25 | 23 25 |
| 15   | 15 45 | 16 31 | 17 19 | 18 8  | 18 58 | 19 51 | 20 46 | 21 43 | 22 41 |
| 16   | 15 13 | 15 58 | 16 46 | 17 32 | 18 20 | 19 12 | 20 5  | 21 0  | 21 57 |
| 17   | 14 41 | 15 24 | 16 9  | 16 55 | 17 42 | 18 32 | 19 23 | 20 17 | 21 12 |
| 18   | 14 9  | 14 50 | 15 33 | 16 17 | 17 3  | 17 51 | 18 41 | 19 33 | 20 26 |
| 19   | 13 36 | 14 16 | 14 57 | 15 40 | 16 24 | 17 11 | 17 59 | 18 49 | 19 40 |
| 20   | 13 2  | 13 41 | 14 21 | 15 2  | 15 44 | 16 29 | 17 15 | 18 4  | 18 53 |
| 21   | 12 29 | 13 5  | 13 44 | 14 27 | 15 4  | 15 47 | 16 31 | 17 18 | 18 6  |
| 22   | 11 54 | 12 29 | 13 6  | 13 44 | 14 23 | 15 4  | 15 47 | 16 31 | 17 17 |
| 23   | 11 19 | 11 53 | 12 27 | 13 3  | 13 41 | 14 20 | 15 1  | 15 44 | 16 28 |
| 24   | 10 43 | 11 15 | 11 48 | 12 23 | 12 58 | 13 36 | 14 15 | 14 56 | 15 37 |
| 25   | 10 7  | 10 35 | 11 9  | 11 41 | 12 15 | 12 51 | 13 28 | 14 6  | 14 46 |
| 26   | 9 30  | 9 59  | 10 28 | 10 59 | 11 31 | 12 5  | 12 39 | 13 16 | 13 54 |
| 27   | 8 53  | 9 19  | 9 47  | 10 16 | 10 46 | 11 17 | 11 50 | 12 25 | 13 0  |
| 28   | 8 14  | 8 39  | 9 5   | 9 32  | 9 59  | 10 29 | 11 0  | 11 32 | 12 5  |
| 29   | 7 35  | 7 58  | 8 23  | 8 46  | 9 12  | 9 40  | 10 8  | 10 38 | 11 9  |
| 30   | 6 55  | 7 16  | 7 37  | 8 0   | 8 24  | 8 49  | 9 15  | 9 43  | 10 11 |
| 31   | 6 14  | 6 32  | 6 52  | 7 13  | 7 34  | 7 57  | 8 21  | 8 46  | 9 11  |
| 32   | 5 31  | 5 48  | 6 6   | 6 24  | 6 43  | 7 4   | 7 25  | 7 48  | 8 10  |



# Residuum Tabule Positionum

| Latitudo | 35    | 36    | 37    | 38    | 39    | 40    | 41    | 42    |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 32       | 60 30 | 62 2  | 65 41 | 68 28 | 71 23 | 74 25 | 77 39 | 81 3  |
| 31       | 59 26 | 61 55 | 64 31 | 67 15 | 70 6  | 73 5  | 76 14 | 79 34 |
| De       | 30    | 58 24 | 60 50 | 63 23 | 66 4  | 68 51 | 71 47 | 74 52 |
| cli      | 29    | 57 23 | 59 47 | 62 17 | 64 55 | 67 39 | 70 31 | 73 33 |
| na       | 28    | 56 24 | 58 45 | 61 13 | 63 48 | 66 29 | 69 18 | 72 16 |
| tio      | 27    | 55 27 | 57 46 | 60 11 | 62 43 | 65 21 | 68 7  | 71 2  |
| Se       | 26    | 54 31 | 56 47 | 59 10 | 61 39 | 64 15 | 66 58 | 69 50 |
| pten     | 25    | 53 36 | 55 50 | 58 10 | 60 36 | 63 10 | 65 50 | 68 40 |
| trio     | 24    | 52 43 | 54 54 | 57 12 | 59 36 | 62 7  | 64 44 | 67 31 |
| na       | 23    | 51 50 | 54 0  | 56 15 | 58 37 | 61 5  | 63 40 | 66 24 |
| lis      | 22    | 51 0  | 53 7  | 55 20 | 57 39 | 60 5  | 62 37 | 65 19 |
| su       | 21    | 50 9  | 52 14 | 54 25 | 56 42 | 59 6  | 61 35 | 64 15 |
| pra      | 20    | 49 19 | 51 22 | 53 31 | 55 46 | 58 7  | 60 35 | 63 12 |
| ter      | 19    | 48 30 | 50 31 | 52 38 | 54 51 | 57 10 | 59 36 | 62 10 |
| ram      | 18    | 47 42 | 49 41 | 51 46 | 53 57 | 56 14 | 58 37 | 61 9  |
|          | 17    | 46 55 | 48 52 | 50 55 | 53 4  | 55 19 | 57 40 | 60 10 |
| Et       | 16    | 46 8  | 48 4  | 50 5  | 52 12 | 54 25 | 56 43 | 59 11 |
| De       | 15    | 45 22 | 47 16 | 49 15 | 51 20 | 53 31 | 55 48 | 58 13 |
| ri       | 14    | 44 36 | 46 28 | 48 26 | 50 29 | 52 38 | 54 53 | 57 16 |
| di       | 13    | 43 51 | 45 41 | 47 37 | 49 39 | 51 45 | 53 58 | 56 20 |
| ana      | 12    | 43 7  | 44 55 | 46 49 | 48 49 | 50 54 | 53 4  | 55 24 |
| sub      | 11    | 42 22 | 44 9  | 46 1  | 47 59 | 50 2  | 52 11 | 54 29 |
| ter      | 10    | 41 39 | 43 24 | 45 14 | 47 10 | 49 12 | 51 18 | 53 34 |
| ra       | 9     | 40 55 | 42 38 | 44 27 | 46 21 | 48 21 | 50 26 | 52 40 |
|          | 8     | 40 12 | 41 54 | 43 41 | 45 33 | 47 31 | 49 34 | 51 46 |
|          | 7     | 39 29 | 41 9  | 42 45 | 44 45 | 46 41 | 48 43 | 50 53 |
|          | 6     | 38 36 | 40 25 | 42 9  | 43 58 | 45 52 | 47 52 | 50 0  |
|          | 5     | 38 4  | 39 41 | 41 23 | 43 10 | 45 3  | 47 1  | 49 7  |
|          | 4     | 37 27 | 38 57 | 40 37 | 42 23 | 44 14 | 46 10 | 48 14 |
|          | 3     | 36 39 | 38 13 | 39 52 | 41 36 | 43 25 | 45 19 | 47 22 |
|          | 2     | 35 57 | 37 29 | 39 7  | 40 49 | 42 36 | 44 29 | 46 29 |
|          | 1     | 35 15 | 36 46 | 38 21 | 40 2  | 41 48 | 43 38 | 45 37 |
|          | 0     | 34 33 | 36 2  | 37 36 | 39 15 | 40 59 | 42 48 | 44 45 |



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| Poli | 43    | 44    | 45    | 46    | 47     | 48     | 49     | 50     | 51     |
|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| D    | D m   | D m   | D m   | D m   | D m    | D m    | D m    | D m    | D m    |
| 32   | 84 40 | 83 34 | 92 44 | 97 18 | 102 20 | 108 1  | 114 38 | 122 57 | 140 39 |
| 31   | 83 7  | 86 55 | 91 0  | 95 28 | 100 23 | 105 56 | 112 25 | 120 33 | 137 5  |
| 30   | 81 37 | 85 20 | 89 20 | 93 42 | 98 31  | 103 57 | 110 18 | 118 18 | 135 29 |
| 29   | 80 10 | 83 49 | 87 44 | 92 1  | 96 44  | 102 4  | 108 18 | 116 10 | 133 12 |
| 28   | 78 46 | 82 21 | 86 11 | 90 24 | 95 2   | 100 16 | 106 24 | 114 8  | 131 2  |
| 27   | 77 24 | 80 56 | 84 42 | 88 50 | 93 23  | 98 32  | 104 34 | 112 12 | 129 0  |
| 26   | 76 5  | 79 33 | 83 15 | 87 19 | 91 48  | 96 52  | 102 49 | 110 21 | 127 2  |
| 25   | 74 49 | 78 13 | 81 52 | 85 51 | 90 16  | 95 16  | 101 7  | 108 35 | 125 10 |
| 24   | 73 34 | 76 55 | 80 30 | 84 26 | 88 47  | 93 42  | 99 29  | 106 52 | 123 21 |
| 23   | 72 21 | 75 39 | 79 11 | 83 4  | 87 21  | 92 12  | 97 55  | 105 12 | 121 37 |
| 22   | 71 10 | 74 25 | 77 54 | 81 43 | 85 56  | 90 44  | 96 23  | 103 36 | 119 56 |
| 21   | 70 1  | 73 13 | 76 38 | 80 24 | 84 34  | 89 18  | 94 53  | 102 3  | 118 18 |
| 20   | 68 52 | 72 2  | 75 25 | 79 7  | 83 14  | 87 55  | 93 26  | 100 31 | 116 43 |
| 19   | 67 46 | 70 52 | 74 13 | 77 52 | 81 56  | 86 33  | 92 1   | 99 3   | 115 10 |
| 18   | 66 40 | 69 44 | 73 2  | 76 39 | 80 39  | 85 13  | 90 38  | 97 36  | 113 39 |
| 17   | 65 36 | 68 37 | 71 52 | 75 26 | 79 24  | 83 55  | 89 17  | 96 11  | 112 11 |
| 16   | 64 33 | 67 32 | 70 44 | 74 15 | 78 10  | 82 38  | 87 57  | 94 48  | 110 44 |
| 15   | 63 30 | 66 27 | 69 36 | 73 6  | 76 58  | 81 23  | 86 38  | 93 26  | 109 19 |
| 14   | 62 29 | 65 23 | 68 30 | 71 57 | 75 46  | 80 9   | 85 21  | 92 6   | 107 56 |
| 13   | 61 28 | 64 20 | 67 25 | 70 49 | 74 36  | 78 55  | 84 5   | 90 47  | 106 34 |
| 12   | 60 28 | 63 18 | 66 20 | 69 42 | 73 27  | 77 43  | 82 50  | 89 29  | 105 13 |
| 11   | 59 29 | 62 16 | 65 17 | 68 36 | 72 18  | 76 32  | 81 36  | 88 13  | 103 53 |
| 10   | 58 30 | 61 15 | 64 13 | 67 30 | 71 10  | 75 22  | 80 23  | 86 57  | 102 35 |
| 9    | 57 32 | 60 15 | 63 11 | 66 25 | 70 3   | 74 12  | 79 11  | 85 42  | 101 17 |
| 8    | 56 34 | 59 15 | 62 9  | 65 21 | 68 56  | 73 3   | 77 59  | 84 27  | 100 0  |
| 7    | 55 36 | 58 16 | 61 7  | 64 17 | 67 50  | 71 54  | 76 48  | 83 14  | 98 43  |
| 6    | 54 39 | 57 17 | 60 6  | 63 14 | 66 44  | 70 46  | 75 38  | 82 1   | 97 27  |
| 5    | 53 43 | 56 18 | 59 5  | 62 11 | 65 39  | 69 39  | 74 28  | 80 48  | 96 12  |
| 4    | 52 46 | 55 19 | 58 5  | 61 8  | 64 34  | 68 31  | 73 18  | 79 36  | 94 57  |
| 3    | 51 50 | 54 21 | 57 4  | 60 6  | 63 29  | 67 24  | 72 8   | 78 24  | 93 43  |
| 2    | 50 54 | 53 23 | 56 4  | 59 3  | 62 25  | 66 17  | 70 59  | 77 12  | 92 28  |
| 1    | 49 58 | 52 25 | 55 4  | 58 1  | 61 20  | 65 11  | 69 50  | 76 1   | 91 14  |
| 0    | 48 2  | 51 27 | 54 4  | 56 59 | 60 16  | 64 4   | 68 41  | 74 49  | 90 0   |



# Residuum Tabule Positionum

| Latitudo |    | 35    | 36    | 37    | 38    | 39    | 40    | 41    | 42    |
|----------|----|-------|-------|-------|-------|-------|-------|-------|-------|
|          |    | B     | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| De       | 0  | 34 33 | 36 2  | 37 36 | 39 15 | 40 59 | 42 48 | 44 45 | 46 49 |
|          | 1  | 33 51 | 35 18 | 36 51 | 38 28 | 40 10 | 41 58 | 44 53 | 45 55 |
| cli      | 2  | 33 9  | 34 35 | 36 5  | 37 41 | 39 22 | 41 7  | 43 1  | 45 1  |
|          | 3  | 32 27 | 33 51 | 35 20 | 36 54 | 38 33 | 40 17 | 42 8  | 44 7  |
| na       | 4  | 31 45 | 33 7  | 34 35 | 36 7  | 37 44 | 39 16 | 41 16 | 43 12 |
|          | 5  | 31 2  | 32 23 | 33 49 | 35 20 | 36 55 | 38 35 | 40 23 | 42 18 |
| De       | 6  | 30 20 | 31 39 | 33 3  | 34 32 | 36 6  | 37 44 | 39 30 | 41 23 |
|          | 7  | 29 37 | 30 55 | 32 17 | 33 45 | 35 17 | 36 53 | 38 37 | 40 28 |
| di       | 8  | 28 54 | 30 10 | 31 31 | 32 57 | 34 27 | 36 2  | 37 44 | 39 33 |
|          | 9  | 28 11 | 29 26 | 31 45 | 32 9  | 33 37 | 35 10 | 36 50 | 38 37 |
| lu       | 10 | 27 27 | 28 40 | 29 58 | 31 20 | 32 46 | 34 18 | 35 56 | 37 41 |
|          | 11 | 26 44 | 27 55 | 29 11 | 30 31 | 31 56 | 33 25 | 35 1  | 36 44 |
| ter      | 12 | 25 59 | 27 9  | 28 23 | 29 41 | 31 4  | 32 32 | 34 6  | 35 47 |
|          | 13 | 25 15 | 26 23 | 27 35 | 28 51 | 30 13 | 31 38 | 33 10 | 34 49 |
| Et       | 14 | 24 30 | 25 36 | 26 46 | 28 1  | 29 20 | 30 43 | 32 14 | 33 51 |
|          | 15 | 23 44 | 24 48 | 25 57 | 27 10 | 28 27 | 29 48 | 31 17 | 32 51 |
| Se       | 16 | 22 58 | 24 0  | 25 7  | 26 18 | 27 33 | 28 53 | 30 19 | 31 51 |
|          | 17 | 22 11 | 23 12 | 24 17 | 25 26 | 26 39 | 27 56 | 29 20 | 30 50 |
| trio     | 18 | 21 24 | 22 23 | 23 16 | 24 33 | 25 44 | 26 59 | 28 21 | 29 48 |
|          | 19 | 20 36 | 21 33 | 22 34 | 23 39 | 24 48 | 26 0  | 27 20 | 28 45 |
| lis      | 20 | 19 47 | 20 42 | 21 41 | 22 44 | 23 51 | 25 1  | 26 18 | 27 41 |
|          | 21 | 18 57 | 19 50 | 20 47 | 21 48 | 22 52 | 24 1  | 25 15 | 26 36 |
| ter      | 22 | 18 6  | 18 57 | 19 52 | 20 51 | 21 53 | 22 59 | 24 11 | 25 29 |
|          | 23 | 17 16 | 18 4  | 18 57 | 19 53 | 20 53 | 21 56 | 23 6  | 24 21 |
|          | 24 | 16 23 | 17 10 | 18 0  | 18 54 | 19 51 | 20 52 | 21 59 | 23 11 |
|          | 25 | 15 30 | 16 14 | 17 2  | 17 54 | 18 48 | 19 46 | 20 50 | 21 59 |
|          | 26 | 14 35 | 15 17 | 16 2  | 16 51 | 17 43 | 18 38 | 19 40 | 20 46 |
|          | 27 | 13 39 | 14 18 | 15 1  | 15 47 | 16 37 | 17 29 | 18 28 | 19 31 |
|          | 28 | 12 42 | 13 19 | 13 59 | 14 42 | 15 29 | 16 18 | 17 14 | 18 13 |
|          | 29 | 11 43 | 12 17 | 12 55 | 13 35 | 14 19 | 15 5  | 15 57 | 16 52 |
|          | 30 | 10 42 | 11 14 | 11 49 | 12 26 | 13 2  | 13 49 | 14 38 | 15 30 |
|          | 31 | 9 40  | 10 9  | 10 41 | 11 15 | 11 52 | 12 31 | 13 16 | 14 4  |
|          | 32 | 8 36  | 9 2   | 9 31  | 10 2  | 10 35 | 11 11 | 11 51 | 12 35 |



Ad .51. Gradus Latitudinis

| Poli | 43    | 44    | 45    | 46    | 47    | 48    | 49    | 50    | 51    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| B    | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 0    | 49 2  | 51 27 | 54 4  | 56 59 | 60 16 | 64 4  | 68 4  | 74 49 | 90 0  |
| 1    | 48 6  | 50 29 | 53 4  | 55 57 | 59 12 | 62 57 | 67 32 | 73 37 | 88 46 |
| 2    | 47 10 | 49 31 | 52 4  | 54 55 | 58 7  | 61 51 | 66 23 | 72 26 | 87 32 |
| 3    | 46 14 | 48 33 | 51 4  | 53 52 | 57 3  | 60 44 | 65 14 | 71 14 | 86 17 |
| 4    | 45 18 | 47 35 | 50 3  | 52 50 | 55 58 | 59 37 | 64 4  | 70 2  | 85 3  |
| 5    | 44 21 | 46 36 | 49 3  | 51 47 | 54 53 | 58 29 | 62 54 | 68 50 | 93 48 |
| 6    | 43 25 | 45 37 | 48 2  | 50 44 | 53 48 | 57 22 | 61 44 | 67 37 | 82 33 |
| 7    | 42 28 | 44 38 | 47 1  | 49 41 | 52 42 | 56 14 | 60 34 | 66 24 | 81 17 |
| 8    | 41 30 | 43 39 | 45 59 | 48 37 | 51 36 | 55 5  | 59 23 | 65 11 | 80 0  |
| 9    | 40 32 | 42 39 | 44 57 | 47 33 | 50 29 | 53 56 | 58 11 | 63 56 | 78 43 |
| 10   | 39 34 | 41 39 | 43 55 | 46 28 | 49 22 | 52 46 | 56 59 | 62 41 | 77 25 |
| 11   | 38 35 | 40 38 | 42 51 | 45 22 | 48 14 | 51 36 | 55 46 | 61 25 | 76 7  |
| 12   | 37 36 | 39 36 | 41 48 | 44 16 | 47 5  | 50 25 | 54 32 | 60 9  | 74 47 |
| 13   | 36 36 | 38 34 | 40 43 | 43 9  | 45 56 | 49 13 | 53 17 | 58 51 | 73 26 |
| 14   | 35 35 | 37 31 | 39 38 | 42 1  | 44 46 | 47 59 | 52 1  | 57 32 | 72 4  |
| 15   | 34 34 | 36 27 | 38 32 | 40 52 | 43 34 | 46 45 | 50 44 | 56 12 | 70 41 |
| 16   | 33 31 | 35 22 | 37 24 | 39 43 | 42 22 | 45 30 | 49 25 | 54 50 | 69 16 |
| 17   | 32 28 | 34 17 | 36 16 | 38 32 | 41 8  | 44 13 | 48 5  | 53 27 | 67 49 |
| 18   | 31 24 | 33 10 | 35 6  | 37 19 | 39 53 | 42 55 | 46 44 | 52 2  | 66 21 |
| 19   | 30 18 | 32 2  | 33 55 | 36 6  | 38 36 | 41 35 | 45 21 | 50 35 | 64 50 |
| 20   | 29 12 | 30 52 | 32 43 | 34 51 | 37 18 | 40 13 | 43 56 | 49 7  | 62 17 |
| 21   | 28 3  | 29 41 | 31 30 | 33 34 | 35 58 | 38 50 | 42 29 | 47 35 | 61 42 |
| 22   | 26 54 | 28 29 | 30 14 | 32 15 | 34 36 | 37 24 | 40 59 | 46 2  | 60 4  |
| 23   | 25 43 | 27 15 | 28 57 | 30 54 | 33 11 | 35 56 | 39 27 | 44 26 | 58 23 |
| 24   | 24 30 | 25 59 | 27 38 | 29 32 | 31 45 | 34 26 | 37 53 | 42 46 | 56 39 |
| 25   | 23 15 | 24 41 | 26 16 | 28 7  | 30 17 | 32 52 | 36 15 | 41 3  | 54 50 |
| 26   | 21 59 | 23 21 | 24 53 | 26 39 | 28 44 | 31 16 | 34 33 | 39 17 | 52 58 |
| 27   | 20 40 | 21 58 | 23 26 | 25 8  | 27 9  | 29 36 | 32 48 | 37 26 | 51 0  |
| 28   | 19 18 | 20 33 | 21 57 | 23 34 | 25 30 | 27 52 | 30 58 | 35 30 | 48 58 |
| 29   | 17 54 | 19 5  | 20 24 | 21 57 | 23 48 | 26 4  | 29 4  | 33 28 | 46 48 |
| 30   | 16 27 | 17 34 | 18 48 | 20 16 | 22 1  | 24 11 | 27 4  | 31 20 | 44 31 |
| 31   | 14 57 | 15 59 | 17 8  | 18 30 | 20 9  | 22 12 | 24 57 | 29 5  | 42 6  |
| 32   | 13 24 | 14 20 | 15 24 | 16 40 | 18 12 | 20 7  | 22 44 | 26 41 | 39 30 |



# Tabula Positionum Generalis

| Latitudo | 60    | 59    | 58    | 57    | 56    | 55    | 54    |
|----------|-------|-------|-------|-------|-------|-------|-------|
|          | S     | S m   | S m   | S m   | S m   | S m   | S m   |
| 1        | 0 35  | 0 36  | 0 37  | 0 39  | 0 40  | 0 42  | 0 44  |
| 2        | 1 9   | 1 12  | 1 15  | 1 18  | 1 21  | 1 24  | 1 27  |
| 3        | 1 44  | 1 48  | 1 53  | 1 57  | 2 2   | 2 6   | 2 11  |
| 4        | 2 19  | 2 24  | 2 30  | 2 36  | 2 42  | 2 48  | 2 55  |
| 5        | 2 54  | 3 1   | 3 8   | 3 15  | 3 23  | 3 31  | 3 39  |
| 6        | 3 29  | 3 37  | 3 46  | 3 55  | 4 4   | 4 13  | 4 23  |
| 7        | 4 4   | 4 14  | 4 24  | 4 34  | 4 45  | 4 56  | 5 7   |
| 8        | 4 39  | 4 51  | 5 2   | 5 14  | 5 26  | 5 39  | 5 52  |
| 9        | 5 15  | 5 28  | 5 41  | 5 54  | 6 8   | 6 22  | 6 36  |
| 10       | 5 51  | 6 5   | 6 20  | 6 35  | 6 50  | 7 6   | 7 22  |
| 11       | 6 27  | 6 42  | 6 59  | 7 15  | 7 32  | 7 49  | 8 7   |
| 12       | 7 3   | 7 20  | 7 38  | 7 56  | 8 15  | 8 34  | 8 53  |
| 13       | 7 40  | 7 58  | 8 18  | 8 37  | 8 58  | 9 18  | 9 39  |
| 14       | 8 17  | 8 37  | 8 8   | 9 19  | 9 41  | 10 3  | 10 26 |
| 15       | 8 54  | 9 16  | 9 38  | 10 1  | 10 25 | 10 49 | 11 14 |
| 16       | 9 32  | 9 55  | 10 19 | 10 44 | 11 9  | 11 35 | 12 1  |
| 17       | 10 10 | 10 35 | 11 1  | 11 27 | 11 54 | 12 22 | 12 50 |
| 18       | 10 49 | 11 16 | 11 43 | 12 11 | 12 40 | 13 9  | 13 39 |
| 19       | 11 28 | 11 56 | 12 25 | 12 55 | 13 26 | 13 57 | 14 29 |
| 20       | 12 8  | 12 38 | 13 9  | 13 40 | 14 13 | 14 46 | 15 20 |
| 21       | 12 48 | 13 20 | 13 53 | 14 26 | 15 0  | 15 36 | 16 12 |
| 22       | 13 29 | 14 3  | 14 37 | 15 13 | 15 49 | 16 26 | 17 4  |
| 23       | 14 11 | 14 57 | 15 23 | 16 0  | 16 38 | 17 17 | 17 58 |
| 24       | 14 54 | 15 31 | 16 9  | 16 48 | 17 29 | 18 10 | 18 52 |
| 25       | 15 37 | 16 16 | 16 56 | 17 38 | 18 20 | 19 3  | 19 48 |
| 26       | 16 21 | 17 2  | 17 45 | 18 28 | 19 12 | 19 58 | 20 45 |
| 27       | 17 6  | 17 50 | 18 34 | 19 19 | 20 6  | 20 54 | 21 44 |
| 28       | 17 53 | 18 38 | 19 24 | 20 12 | 21 1  | 21 51 | 22 43 |
| 29       | 18 40 | 19 27 | 20 16 | 21 6  | 21 57 | 22 50 | 23 45 |
| 30       | 19 28 | 20 18 | 21 9  | 22 1  | 22 55 | 23 51 | 24 48 |



# Positionum Generalis

|    |    | 60    | 59    | 58    | 57    | 56    | 55    | 54 regidis |
|----|----|-------|-------|-------|-------|-------|-------|------------|
|    | D  | D m   | D m   | D m   | D m   | D m   | D m   | D m        |
| 54 | 31 | 20 18 | 21 10 | 22 3  | 22 58 | 23 55 | 29 53 | 25 53      |
| 53 | 32 | 21 9  | 22 3  | 22 59 | 23 56 | 24 56 | 25 57 | 27 0       |
| 52 | 33 | 22 1  | 22 53 | 23 56 | 24 57 | 25 59 | 27 3  | 28 9       |
| 51 | 34 | 22 55 | 23 55 | 24 56 | 25 59 | 27 4  | 28 11 | 29 21      |
| 50 | 35 | 23 51 | 24 53 | 25 57 | 27 3  | 28 11 | 29 22 | 30 35      |
| 49 | 36 | 24 48 | 25 53 | 27 7  | 28 9  | 29 21 | 30 35 | 31 52      |
| 48 | 37 | 25 47 | 26 55 | 28 5  | 29 18 | 30 33 | 31 51 | 33 12      |
| 47 | 38 | 26 49 | 28 0  | 29 13 | 30 29 | 31 48 | 33 10 | 34 35      |
| 46 | 39 | 27 52 | 29 7  | 30 24 | 31 44 | 33 6  | 34 33 | 36 2       |
| 45 | 40 | 28 54 | 30 17 | 31 37 | 33 1  | 34 28 | 35 59 | 37 34      |
| 44 | 41 | 30 7  | 31 29 | 32 54 | 34 22 | 35 54 | 37 30 | 39 10      |
| 43 | 42 | 31 19 | 32 45 | 34 14 | 35 47 | 37 24 | 39 5  | 40 51      |
| 42 | 43 | 32 34 | 34 5  | 35 39 | 37 16 | 38 59 | 40 46 | 42 39      |
| 41 | 44 | 33 53 | 35 28 | 37 7  | 38 50 | 40 39 | 42 33 | 44 33      |
| 40 | 45 | 35 16 | 36 56 | 38 40 | 40 30 | 42 25 | 44 27 | 46 36      |
| 39 | 46 | 36 43 | 38 29 | 40 19 | 42 15 | 44 18 | 46 29 | 48 48      |
| 38 | 47 | 38 15 | 40 7  | 42 4  | 44 8  | 46 20 | 48 40 | 51 11      |
| 37 | 48 | 39 53 | 41 52 | 43 57 | 46 9  | 48 31 | 51 3  | 53 48      |
| 36 | 49 | 41 37 | 43 44 | 45 57 | 48 20 | 50 53 | 53 40 | 56 42      |
| 35 | 50 | 43 29 | 45 44 | 48 8  | 50 42 | 53 30 | 56 34 | 59 59      |
| 34 | 51 | 45 29 | 47 54 | 50 30 | 53 19 | 56 24 | 59 51 | 63 48      |
| 33 | 52 | 47 39 | 50 16 | 53 7  | 56 13 | 59 42 | 63 40 | 68 25      |
| 32 | 53 | 50 1  | 52 53 | 56 1  | 59 31 | 63 31 | 68 19 | 74 37      |
| 31 | 54 | 52 37 | 55 48 | 59 19 | 63 22 | 68 11 | 74 32 | 90 0       |
| 30 | 55 | 55 32 | 59 6  | 63 10 | 68 2  | 74 26 | 90 0  |            |
| 29 | 56 | 58 52 | 62 58 | 67 53 | 74 19 | 90 0  |       |            |
| 28 | 57 | 62 45 | 67 42 | 74 12 | 90 0  |       |       |            |
| 27 | 58 | 67 31 | 74 4  | 90 0  |       |       |       |            |
| 26 | 59 | 73 55 | 90 0  |       |       |       |       |            |
| 25 | 60 | 90 0  |       |       |       |       |       |            |

D P 1



# Residuum Tabule

| Latitudo | 53    | 52    | 51    | 50    | 49    | 48    | 47    |
|----------|-------|-------|-------|-------|-------|-------|-------|
| B        | B m   | B m   | B m   | B m   | B m   | B m   | B m   |
| 1        | 0 45  | 0 47  | 0 49  | 0 50  | 0 52  | 0 54  | 0 56  |
| 2        | 1 30  | 1 34  | 1 37  | 1 41  | 1 44  | 1 48  | 1 52  |
| 3        | 2 16  | 2 21  | 2 26  | 2 31  | 2 37  | 2 42  | 2 48  |
| 4        | 3 1   | 3 8   | 3 15  | 3 22  | 3 29  | 3 37  | 3 44  |
| ele      | 5     | 3 47  | 3 55  | 4 4   | 4 13  | 4 22  | 4 31  |
| ua       | 6     | 4 33  | 4 43  | 4 53  | 5 4   | 5 15  | 5 26  |
| no       | 7     | 5 19  | 5 30  | 5 42  | 5 55  | 6 8   | 6 21  |
| po       | 8     | 6 5   | 6 18  | 6 32  | 6 46  | 7 1   | 7 16  |
| li       | 9     | 6 51  | 7 6   | 7 22  | 7 38  | 7 55  | 8 12  |
| fu       | 10    | 7 38  | 7 55  | 8 13  | 8 30  | 8 49  | 9 8   |
| pra      | 11    | 8 25  | 8 44  | 9 3   | 9 23  | 9 44  | 10 5  |
| cir      | 12    | 9 13  | 9 34  | 9 55  | 10 16 | 10 39 | 11 2  |
| cu       | 13    | 10 1  | 10 24 | 10 46 | 11 10 | 11 35 | 12 0  |
| lum      | 14    | 10 50 | 11 14 | 11 39 | 12 5  | 12 31 | 12 58 |
| po       | 15    | 11 39 | 12 5  | 12 32 | 13 0  | 13 28 | 13 58 |
| fi       | 16    | 12 29 | 12 57 | 13 26 | 13 55 | 14 26 | 14 58 |
| no       | 17    | 13 19 | 13 49 | 14 20 | 14 52 | 15 25 | 15 59 |
| nis      | 18    | 14 10 | 14 42 | 15 15 | 15 49 | 16 24 | 17 1  |
| 19       | 15 2  | 15 36 | 16 11 | 16 48 | 17 25 | 18 4  | 18 44 |
| 20       | 15 55 | 16 31 | 17 8  | 17 47 | 18 27 | 19 8  | 19 50 |
| 21       | 16 49 | 17 27 | 18 7  | 18 47 | 19 30 | 20 13 | 20 59 |
| 22       | 17 44 | 18 24 | 19 6  | 19 49 | 20 34 | 21 20 | 22 8  |
| 23       | 18 39 | 19 22 | 20 6  | 20 52 | 21 39 | 22 28 | 23 19 |
| 24       | 19 36 | 20 21 | 21 8  | 21 56 | 22 46 | 23 38 | 24 32 |
| 25       | 20 34 | 21 22 | 22 11 | 23 2  | 23 55 | 24 50 | 25 47 |
| 26       | 21 34 | 22 24 | 23 16 | 24 9  | 25 5  | 26 3  | 27 3  |
| 27       | 22 35 | 23 28 | 24 22 | 25 19 | 26 17 | 27 18 | 28 24 |
| 28       | 23 37 | 24 33 | 25 30 | 26 30 | 27 32 | 28 36 | 29 44 |
| 29       | 24 41 | 25 40 | 26 40 | 27 43 | 28 48 | 29 56 | 31 8  |
| 30       | 25 47 | 26 49 | 27 52 | 28 59 | 30 7  | 31 19 | 32 34 |



# Positionum Generalis

|       |     | 53    | 52    | 51    | 50    | 49    | 48    | 47 regiois |
|-------|-----|-------|-------|-------|-------|-------|-------|------------|
|       | B m | B m   | B m   | B m   | B m   | B m   | B m   | B m        |
| 47    | 31  | 26 55 | 28 0  | 29 7  | 30 17 | 31 29 | 32 45 | 34 5       |
| 5 m   | 32  | 28 5  | 29 13 | 30 34 | 31 37 | 32 54 | 34 14 | 35 38      |
| 0 56  | 33  | 29 18 | 30 29 | 31 44 | 33 1  | 34 22 | 35 47 | 37 16      |
| 1 52  | 34  | 30 33 | 31 48 | 33 6  | 34 28 | 35 54 | 37 24 | 38 59      |
| 2 48  | 35  | 31 51 | 33 10 | 34 33 | 35 59 | 37 30 | 39 5  | 40 46      |
| 3 44  | 36  | 33 12 | 34 35 | 36 2  | 37 34 | 39 10 | 40 51 | 42 39      |
| 4 41  | 37  | 34 36 | 36 4  | 37 36 | 39 13 | 40 55 | 42 44 | 44 39      |
| 5 37  | 38  | 36 4  | 37 37 | 39 15 | 40 58 | 42 47 | 44 42 | 46 46      |
| 6 34  | 39  | 37 36 | 39 15 | 40 59 | 42 48 | 44 45 | 46 49 | 49 2       |
| 7 32  | 40  | 39 13 | 40 58 | 42 48 | 44 45 | 46 50 | 49 4  | 51 29      |
| 8 30  | 41  | 40 45 | 42 47 | 44 45 | 46 50 | 49 5  | 51 31 | 54 10      |
| 9 28  | 42  | 42 44 | 44 42 | 46 49 | 49 4  | 51 29 | 54 10 | 57 6       |
| 10 27 | 43  | 44 39 | 46 46 | 49 2  | 51 29 | 54 10 | 57 6  | 60 25      |
| 11 26 | 44  | 46 42 | 48 59 | 51 27 | 54 8  | 57 5  | 60 24 | 64 14      |
| 12 26 | 45  | 48 54 | 51 23 | 54 4  | 57 3  | 60 23 | 64 13 | 68 50      |
| 13 27 | 46  | 51 17 | 54 0  | 56 59 | 60 20 | 64 11 | 68 48 | 74 56      |
| 14 28 | 47  | 53 55 | 56 55 | 69 16 | 64 8  | 68 47 | 74 55 | 90 0       |
| 15 31 | 48  | 56 49 | 60 12 | 64 4  | 68 44 | 74 54 | 90 0  |            |
| 16 34 | 49  | 60 6  | 64 0  | 68 41 | 74 51 | 90 0  |       |            |
| 17 38 | 50  | 63 54 | 68 37 | 74 49 | 90 0  |       |       |            |
| 18 44 | 51  | 68 32 | 74 45 | 90 0  |       |       |       |            |
| 19 50 | 52  | 74 42 | 90 0  |       |       |       |       |            |
| 20 59 | 53  | 90 0  |       |       |       |       |       |            |
| 21 8  |     |       |       |       |       |       |       |            |
| 22 19 |     |       |       |       |       |       |       |            |
| 23 32 |     |       |       |       |       |       |       |            |
| 24 47 |     |       |       |       |       |       |       |            |
| 25 3  |     |       |       |       |       |       |       |            |
| 26 24 |     |       |       |       |       |       |       |            |
| 27 44 |     |       |       |       |       |       |       |            |
| 28 8  |     |       |       |       |       |       |       |            |
| 29 34 |     |       |       |       |       |       |       |            |



# Residuum Tabule

| Latitudo | 46   | 45    | 44    | 43    | 42    | 41    | 40    |
|----------|------|-------|-------|-------|-------|-------|-------|
| B        | B m  | B m   | B m   | B m   | B m   | B m   | B m   |
| 1        | 0 58 | 1 0   | 1 2   | 1 4   | 1 7   | 1 9   | 1 12  |
| 2        | 1 56 | 2 0   | 2 4   | 2 9   | 2 13  | 2 18  | 2 23  |
| 3        | 2 54 | 3 0   | 3 7   | 3 13  | 3 20  | 3 27  | 3 35  |
| 4        | 3 52 | 4 1   | 4 9   | 4 18  | 4 27  | 4 37  | 4 47  |
| Ele      | 5    | 4 51  | 5 1   | 5 12  | 5 23  | 5 35  | 5 59  |
| ua       | 6    | 5 50  | 6 2   | 6 15  | 6 28  | 6 42  | 7 12  |
| tio      | 7    | 6 49  | 7 3   | 7 18  | 7 34  | 7 50  | 8 25  |
| po       | 8    | 7 48  | 8 5   | 8 22  | 8 40  | 8 59  | 9 38  |
| li       | 9    | 8 48  | 9 7   | 9 26  | 9 47  | 10 8  | 10 53 |
| su       | 10   | 9 48  | 10 9  | 10 31 | 10 54 | 11 18 | 12 8  |
| pra      | 11   | 10 49 | 11 13 | 11 37 | 12 2  | 12 28 | 13 24 |
| cir      | 12   | 11 51 | 12 16 | 12 43 | 13 11 | 13 39 | 14 9  |
| cu       | 13   | 12 53 | 13 21 | 13 50 | 14 20 | 14 51 | 15 58 |
| lum      | 14   | 13 56 | 14 26 | 14 58 | 15 30 | 16 5  | 17 17 |
| po       | 15   | 15 0  | 15 32 | 16 6  | 16 42 | 17 19 | 18 37 |
| fi       | 16   | 16 5  | 16 40 | 17 16 | 17 54 | 18 34 | 19 59 |
| tio      | 17   | 17 10 | 17 48 | 18 27 | 19 8  | 19 51 | 20 35 |
| nis      | 18   | 18 17 | 18 58 | 19 40 | 20 23 | 21 9  | 21 57 |
|          | 19   | 19 25 | 20 8  | 20 53 | 21 40 | 22 29 | 23 20 |
|          | 20   | 20 35 | 21 21 | 22 8  | 22 58 | 23 51 | 24 45 |
|          | 21   | 21 46 | 22 34 | 23 25 | 24 19 | 25 14 | 26 12 |
|          | 22   | 22 58 | 23 50 | 24 44 | 25 40 | 26 40 | 27 42 |
|          | 23   | 24 12 | 25 7  | 26 5  | 27 5  | 28 8  | 29 14 |
|          | 24   | 25 28 | 26 26 | 27 27 | 28 31 | 29 38 | 30 48 |
|          | 25   | 26 46 | 28 48 | 28 52 | 30 0  | 31 11 | 32 26 |
|          | 26   | 28 6  | 29 11 | 30 20 | 31 32 | 32 48 | 34 8  |
|          | 27   | 29 29 | 30 38 | 31 51 | 33 7  | 34 28 | 35 53 |
|          | 28   | 30 54 | 32 7  | 33 24 | 34 46 | 36 12 | 37 43 |
|          | 29   | 32 22 | 33 40 | 35 2  | 36 28 | 38 0  | 39 47 |
|          | 30   | 33 53 | 35 16 | 36 43 | 38 15 | 39 53 | 41 47 |



# Positionum Generalis

|    | 46    | 45    | 44    | 43    | 42    | 41    | 40 regione |
|----|-------|-------|-------|-------|-------|-------|------------|
| h  | h m   | h m   | h m   | h m   | h m   | h m   | h m        |
| 31 | 35 28 | 36 56 | 38 29 | 40 7  | 41 52 | 43 44 | 45 44      |
| 32 | 37 7  | 38 40 | 40 19 | 42 4  | 43 57 | 45 57 | 48 8       |
| 33 | 39 50 | 40 30 | 42 15 | 44 8  | 46 2  | 48 20 | 50 43      |
| 34 | 40 39 | 42 25 | 44 18 | 46 20 | 48 31 | 50 53 | 53 30      |
| 35 | 42 33 | 44 27 | 46 29 | 48 40 | 51 3  | 53 40 | 56 34      |
| 36 | 44 33 | 46 36 | 48 48 | 51 11 | 53 48 | 56 42 | 59 59      |
| 37 | 46 42 | 48 54 | 51 17 | 53 55 | 56 49 | 56 6  | 63 54      |
| 38 | 48 59 | 51 23 | 54 0  | 56 55 | 60 12 | 60 0  | 68 37      |
| 39 | 51 27 | 54 4  | 56 59 | 60 16 | 64 4  | 68 41 | 74 49      |
| 40 | 54 8  | 57 3  | 60 20 | 64 8  | 68 44 | 74 51 | 90 0       |
| 41 | 57 5  | 60 23 | 64 11 | 68 47 | 74 54 | 90 0  |            |
| 42 | 60 24 | 64 13 | 68 49 | 74 55 | 90 0  |       |            |
| 43 | 64 14 | 68 50 | 74 26 | 90 0  |       |       |            |
| 44 | 68 51 | 74 57 | 90 0  |       |       |       |            |
| 45 | 74 57 | 90 0  |       |       |       |       |            |
| 46 | 90 0  |       |       |       |       |       |            |



# Residuum Tabule

| Latitudo         |    | 39    | 38    | 37    | 36    | 35    |
|------------------|----|-------|-------|-------|-------|-------|
| B                |    | B m   | B m   | B m   | B m   | B m   |
|                  | 1  | 1 14  | 1 17  | 1 20  | 1 23  | 1 26  |
|                  | 2  | 2 28  | 2 34  | 2 39  | 2 45  | 2 51  |
|                  | 3  | 3 43  | 3 51  | 3 59  | 4 8   | 4 17  |
|                  | 4  | 4 57  | 5 8   | 5 19  | 5 31  | 5 44  |
| Ele<br>ua<br>tio | 5  | 6 12  | 6 26  | 6 40  | 6 55  | 7 11  |
|                  | 6  | 7 27  | 7 44  | 8 1   | 8 19  | 8 38  |
|                  | 7  | 8 43  | 9 2   | 9 23  | 9 44  | 10 6  |
|                  | 8  | 10 0  | 10 22 | 10 45 | 11 9  | 11 35 |
| po<br>li         | 9  | 11 17 | 11 42 | 12 8  | 12 35 | 13 4  |
|                  | 10 | 12 35 | 13 3  | 13 32 | 14 3  | 14 35 |
| lu<br>pra        | 11 | 13 53 | 14 24 | 14 57 | 15 31 | 16 7  |
|                  | 12 | 15 13 | 15 47 | 16 23 | 17 1  | 17 40 |
| cir<br>cu        | 13 | 16 34 | 17 11 | 17 50 | 18 32 | 19 15 |
|                  | 14 | 17 56 | 18 37 | 19 19 | 20 4  | 20 52 |
| lum<br>po        | 15 | 19 19 | 20 3  | 20 50 | 21 38 | 22 30 |
|                  | 16 | 20 44 | 21 32 | 22 22 | 23 15 | 24 10 |
| fi<br>tio        | 17 | 22 11 | 23 2  | 23 56 | 24 53 | 25 53 |
|                  | 18 | 23 39 | 24 33 | 25 33 | 26 34 | 27 39 |
| nis              | 19 | 25 10 | 26 9  | 27 11 | 28 17 | 29 27 |
|                  | 20 | 26 43 | 27 46 | 28 53 | 30 4  | 31 19 |
|                  | 21 | 28 18 | 29 26 | 30 37 | 31 54 | 33 13 |
|                  | 22 | 29 56 | 31 8  | 32 25 | 33 47 | 35 14 |
|                  | 23 | 31 37 | 32 55 | 34 17 | 35 45 | 37 19 |
|                  | 24 | 33 21 | 34 44 | 36 13 | 37 48 | 39 29 |
|                  | 25 | 35 10 | 36 39 | 38 14 | 39 56 | 41 45 |
|                  | 26 | 37 2  | 38 38 | 40 20 | 42 10 | 44 9  |
|                  | 27 | 38 0  | 40 42 | 42 33 | 44 32 | 46 41 |
|                  | 28 | 41 2  | 41 53 | 44 53 | 47 2  | 49 24 |
|                  | 29 | 43 12 | 45 12 | 47 21 | 49 44 | 52 20 |
|                  | 30 | 45 29 | 47 39 | 50 1  | 52 37 | 55 32 |



# Positionum Generalis

|     |       |       |       |       |         | radioz |       |
|-----|-------|-------|-------|-------|---------|--------|-------|
| 39  | 38    | 37    | 36    | 35    | Regiois | 34     |       |
| B m | B m   | B m   | B m   | B m   |         | B m    |       |
| 31  | 47 54 | 50 16 | 52 53 | 55 48 | 59 6    | 1      | 60 0  |
| 32  | 50 30 | 53 7  | 56 1  | 59 19 | 63 10   | 2      | 59 59 |
| 33  | 53 19 | 56 13 | 59 31 | 63 22 | 68 2    | 3      | 59 57 |
| 34  | 56 24 | 59 42 | 63 31 | 68 11 | 74 26   | 4      | 59 55 |
| 35  | 59 51 | 63 40 | 68 19 | 74 32 | 90 0    | 5      | 59 52 |
| 36  | 63 48 | 68 25 | 74 37 | 90 0  |         | 6      | 59 49 |
| 37  | 68 32 | 74 41 | 90 0  |       |         | 7      | 59 45 |
| 38  | 74 45 | 90 0  |       |       |         | 8      | 59 40 |
| 39  | 90 0  |       |       |       |         |        |       |

*ewb*  
*Lanna X*  
*p Δ de m*  
*c. 170. 8*  
*u. s. d. m. r.*  
*p. m. a. l. o. r.*  
*Stilb.*

## Tabella Mensium Profectionalium ac Usualium

|   |    |     |    |    |    | Menses     |  | Anni | Anni       |
|---|----|-----|----|----|----|------------|--|------|------------|
|   |    |     |    |    |    | Usuales    |  | Lōis | Bisextilis |
|   |    |     |    |    |    |            |  | Dies | Dies       |
| Men<br>ses<br>pro<br>fe<br>cto<br>na<br>les | 1  | 28  | 2  | 17 | 37 | Januarius  |  | 31   | 31         |
|   | 2  | 56  | 4  | 35 | 14 |            |  | 59   | 60         |
|   | 3  | 84  | 6  | 52 | 51 |            |  | 90   | 91         |
|   | 4  | 112 | 9  | 10 | 28 | Februarius |  |      |            |
|   | 5  | 140 | 11 | 28 | 5  | Martius    |  |      |            |
|   | 6  | 168 | 13 | 45 | 42 | Aprilis    |  | 120  | 121        |
|   | 7  | 196 | 16 | 3  | 18 | Maius      |  | 151  | 152        |
|   | 8  | 224 | 18 | 20 | 55 | Junius     |  | 181  | 182        |
|   | 9  | 252 | 20 | 38 | 32 | Julius     |  | 212  | 213        |
|   | 10 | 280 | 22 | 56 | 9  | Augustus   |  | 243  | 244        |
|   | 11 | 309 | 1  | 13 | 46 | Septēber   |  | 273  | 274        |
|   | 12 | 337 | 3  | 31 | 23 | October    |  | 304  | 305        |
|   | 13 | 365 | 5  | 49 | 0  | Novēber    |  | 334  | 335        |
|   |    |     |    |    |    | Decēber    |  | 365  | 366        |



# Tabula Projectionis Mensuræ

| Dies | In diebus |    |    |    | In horis et minutis |   |    |    |    |   |    |    |
|------|-----------|----|----|----|---------------------|---|----|----|----|---|----|----|
|      | s         | g  | m  | z  | h                   | s | m  | z  | m  | s | m  | z  |
| 1    | 0         | 1  | 4  | 4  | 1                   | 0 | 2  | 40 | 31 | 1 | 22 | 45 |
| 2    | 0         | 2  | 8  | 8  | 2                   | 0 | 5  | 20 | 32 | 1 | 25 | 25 |
| 3    | 0         | 3  | 12 | 12 | 3                   | 0 | 8  | 0  | 33 | 1 | 28 | 6  |
| 4    | 0         | 4  | 16 | 16 | 4                   | 0 | 10 | 41 | 34 | 1 | 30 | 46 |
| 5    | 0         | 5  | 20 | 20 | 5                   | 0 | 13 | 21 | 35 | 1 | 33 | 26 |
| 6    | 0         | 6  | 24 | 24 | 6                   | 0 | 16 | 1  | 36 | 1 | 36 | 6  |
| 7    | 0         | 7  | 28 | 28 | 7                   | 0 | 18 | 41 | 37 | 1 | 38 | 46 |
| 8    | 0         | 8  | 32 | 32 | 8                   | 0 | 21 | 21 | 38 | 1 | 41 | 26 |
| 9    | 0         | 9  | 36 | 36 | 9                   | 0 | 24 | 1  | 39 | 1 | 44 | 7  |
| 10   | 0         | 10 | 40 | 40 | 10                  | 0 | 26 | 42 | 40 | 1 | 46 | 47 |
| 11   | 0         | 11 | 44 | 44 | 11                  | 0 | 29 | 22 | 41 | 1 | 49 | 27 |
| 12   | 0         | 12 | 48 | 48 | 12                  | 0 | 32 | 2  | 42 | 1 | 51 | 7  |
| 13   | 0         | 13 | 52 | 52 | 13                  | 0 | 34 | 42 | 43 | 1 | 54 | 47 |
| 14   | 0         | 14 | 56 | 56 | 14                  | 0 | 37 | 22 | 44 | 1 | 57 | 27 |
| 15   | 0         | 16 | 1  | 0  | 15                  | 0 | 40 | 3  | 45 | 2 | 0  | 8  |
| 16   | 0         | 17 | 5  | 4  | 16                  | 0 | 42 | 43 | 46 | 2 | 2  | 48 |
| 17   | 0         | 18 | 9  | 8  | 17                  | 0 | 45 | 23 | 47 | 2 | 5  | 28 |
| 18   | 0         | 19 | 13 | 12 | 18                  | 0 | 48 | 3  | 48 | 2 | 8  | 8  |
| 19   | 0         | 20 | 17 | 16 | 19                  | 0 | 50 | 43 | 49 | 2 | 10 | 48 |
| 20   | 0         | 21 | 21 | 20 | 20                  | 0 | 53 | 23 | 50 | 2 | 13 | 28 |
| 21   | 0         | 22 | 25 | 24 | 21                  | 0 | 56 | 4  | 51 | 2 | 16 | 9  |
| 22   | 0         | 23 | 29 | 28 | 22                  | 0 | 58 | 44 | 52 | 2 | 18 | 49 |
| 23   | 0         | 24 | 33 | 32 | 23                  | 1 | 1  | 24 | 53 | 2 | 21 | 29 |
| 24   | 0         | 25 | 37 | 36 | 24                  | 1 | 4  | 4  | 54 | 2 | 24 | 9  |
| 25   | 0         | 26 | 41 | 40 | 25                  | 1 | 6  | 44 | 55 | 2 | 26 | 49 |
| 26   | 0         | 27 | 45 | 44 | 26                  | 1 | 9  | 24 | 56 | 2 | 29 | 29 |
| 27   | 0         | 28 | 49 | 48 | 27                  | 1 | 12 | 5  | 57 | 2 | 32 | 10 |
| 28   | 0         | 29 | 53 | 52 | 28                  | 1 | 14 | 45 | 58 | 2 | 34 | 50 |
| 29   | 1         | 0  | 57 | 56 | 29                  | 1 | 17 | 25 | 59 | 2 | 37 | 30 |
| 30   |           |    |    |    | 30                  | 1 | 20 | 5  | 60 | 2 | 40 | 10 |



# Tabula Profectionis Diurne

| Dies | In diebus |    |    |    | In horis et minutis |    |    |    |    |    |    |    |
|------|-----------|----|----|----|---------------------|----|----|----|----|----|----|----|
|      | s         | g  | m  | z  | h                   | h  | m  | z  | m  | h  | m  | z  |
| 1    | 0         | 13 | 52 | 52 | 1                   | 0  | 34 | 42 | 31 | 17 | 55 | 48 |
| 2    | 0         | 27 | 45 | 45 | 2                   | 1  | 9  | 24 | 32 | 18 | 30 | 30 |
| 3    | 1         | 11 | 38 | 37 | 3                   | 1  | 44 | 7  | 33 | 19 | 5  | 12 |
| 4    | 1         | 25 | 31 | 29 | 4                   | 2  | 18 | 49 | 34 | 19 | 39 | 54 |
| 5    | 2         | 9  | 24 | 21 | 5                   | 2  | 53 | 31 | 35 | 20 | 14 | 36 |
| 6    | 2         | 23 | 17 | 14 | 6                   | 3  | 28 | 13 | 36 | 20 | 49 | 18 |
| 7    | 3         | 7  | 10 | 6  | 7                   | 4  | 2  | 55 | 37 | 21 | 24 | 1  |
| 8    | 3         | 21 | 2  | 58 | 8                   | 4  | 37 | 37 | 38 | 21 | 58 | 43 |
| 9    | 4         | 4  | 55 | 51 | 9                   | 5  | 12 | 20 | 39 | 22 | 23 | 25 |
| 10   | 4         | 18 | 48 | 43 | 10                  | 5  | 47 | 2  | 40 | 23 | 8  | 7  |
| 11   | 5         | 2  | 41 | 35 | 11                  | 6  | 21 | 44 | 41 | 23 | 42 | 49 |
| 12   | 5         | 16 | 34 | 28 | 12                  | 6  | 56 | 26 | 42 | 24 | 17 | 32 |
| 13   | 6         | 0  | 27 | 20 | 13                  | 7  | 31 | 8  | 43 | 24 | 52 | 14 |
| 14   | 6         | 14 | 20 | 12 | 14                  | 8  | 5  | 51 | 44 | 25 | 26 | 56 |
| 15   | 6         | 28 | 13 | 4  | 15                  | 8  | 40 | 33 | 45 | 26 | 1  | 38 |
| 16   | 7         | 12 | 5  | 57 | 16                  | 9  | 15 | 15 | 46 | 26 | 36 | 20 |
| 17   | 7         | 25 | 58 | 49 | 17                  | 9  | 49 | 57 | 47 | 27 | 11 | 2  |
| 18   | 8         | 9  | 51 | 41 | 18                  | 10 | 24 | 39 | 48 | 27 | 45 | 45 |
| 19   | 8         | 23 | 44 | 34 | 19                  | 10 | 59 | 21 | 49 | 28 | 20 | 27 |
| 20   | 9         | 7  | 37 | 26 | 20                  | 11 | 34 | 4  | 50 | 28 | 55 | 9  |
| 21   | 9         | 21 | 30 | 18 | 21                  | 12 | 8  | 46 | 51 | 29 | 29 | 51 |
| 22   | 10        | 5  | 23 | 11 | 22                  | 12 | 43 | 28 | 52 | 30 | 14 | 33 |
| 23   | 10        | 19 | 16 | 3  | 23                  | 13 | 18 | 10 | 53 | 30 | 39 | 15 |
| 24   | 11        | 3  | 8  | 55 | 24                  | 13 | 52 | 52 | 54 | 31 | 13 | 58 |
| 25   | 11        | 17 | 1  | 47 | 25                  | 14 | 27 | 34 | 55 | 31 | 48 | 40 |
| 26   | 0         | 0  | 54 | 40 | 26                  | 14 | 2  | 17 | 56 | 32 | 23 | 22 |
| 27   | 0         | 14 | 47 | 32 | 27                  | 15 | 36 | 59 | 57 | 32 | 58 | 4  |
| 28   | 0         | 28 | 40 | 24 | 28                  | 16 | 11 | 41 | 58 | 33 | 32 | 46 |
| 29   | 1         | 12 | 33 | 15 | 29                  | 16 | 46 | 23 | 59 | 34 | 7  | 29 |
| 30   |           |    |    |    | 30                  | 17 | 21 | 5  | 60 | 34 | 42 | 11 |



Incipit Tabella.

|      | 0      | 1        | 2        | 3        | 4        | 5        |
|------|--------|----------|----------|----------|----------|----------|
| pres | pres   | pres     | pres     | pres     | pres     | pres     |
| 1    | 17 291 | 1064 291 | 2111 291 | 3157 190 | 4202 290 | 5246 290 |
| 2    | 34     | 1082     | 2128     | 3175     | 4220     | 5264     |
| 3    | 52     | 1099     | 2146     | 3192     | 4237     | 5281     |
| 4    | 69     | 1116     | 2163     | 3209     | 4255     | 5298     |
| 5    | 87     | 1134     | 2181     | 3227     | 4272     | 5316     |
| 6    | 104    | 1151     | 2198     | 3244     | 4289     | 5333     |
| 7    | 122    | 1169     | 2216     | 3262     | 4307     | 5351     |
| 8    | 139    | 1186     | 2233     | 3279     | 4324     | 5368     |
| 9    | 157    | 1204     | 2250     | 3297     | 4342     | 5385     |
| 10   | 174    | 1221     | 2268     | 3314     | 4359     | 5403     |
| 11   | 191    | 1239     | 2285     | 3331     | 4376     | 5420     |
| 12   | 209    | 1256     | 2303     | 3349     | 4394     | 5437     |
| 13   | 226    | 1274     | 2320     | 3366     | 4411     | 5455     |
| 14   | 244    | 1291     | 2338     | 3384     | 4429     | 5472     |
| 15   | 261    | 1308     | 2355     | 3401     | 4446     | 5490     |
| 16   | 279    | 1326     | 2373     | 3418     | 4463     | 5507     |
| 17   | 296    | 1343     | 2390     | 3436     | 4481     | 5524     |
| 18   | 314    | 1361     | 2407     | 3453     | 4498     | 5542     |
| 19   | 331    | 1378     | 2425     | 3471     | 4516     | 5559     |
| 20   | 349    | 1396     | 2442     | 3488     | 4533     | 5577     |
| 21   | 366    | 1413     | 2460     | 3506     | 4550     | 5594     |
| 22   | 383    | 1431     | 2477     | 3523     | 4568     | 5611     |
| 23   | 401    | 1448     | 2495     | 3540     | 4585     | 5629     |
| 24   | 418    | 1465     | 2512     | 3558     | 4603     | 5646     |
| 25   | 436    | 1483     | 2529     | 3575     | 4620     | 5663     |
| 26   | 453    | 1500     | 2547     | 3593     | 4637     | 5681     |
| 27   | 471    | 1518     | 2564     | 3610     | 4655     | 5698     |
| 28   | 488    | 1535     | 2582     | 3628     | 4672     | 5716     |
| 29   | 506    | 1553     | 2599     | 3645     | 4690     | 5733     |
| 30   | 523    | 1570     | 2617     | 3662     | 4707     | 5750     |



Sinus recti.

| 5  | 0    | 1    | 2    | 3    | 4    | 5    | 6    |
|----|------|------|------|------|------|------|------|
| in | ptes | ptes | ptes | ptes | ptes | ptes | ptes |
| 31 | 541  | 558  | 575  | 593  | 610  | 628  | 645  |
| 32 | 558  | 575  | 593  | 610  | 628  | 645  | 663  |
| 33 | 575  | 593  | 610  | 628  | 645  | 663  | 680  |
| 34 | 593  | 610  | 628  | 645  | 663  | 680  | 698  |
| 35 | 610  | 628  | 645  | 663  | 680  | 698  | 715  |
| 36 | 628  | 645  | 663  | 680  | 698  | 715  | 733  |
| 37 | 645  | 663  | 680  | 698  | 715  | 733  | 750  |
| 38 | 663  | 680  | 698  | 715  | 733  | 750  | 767  |
| 39 | 680  | 698  | 715  | 733  | 750  | 767  | 785  |
| 40 | 698  | 715  | 733  | 750  | 767  | 785  | 802  |
| 41 | 715  | 733  | 750  | 767  | 785  | 802  | 820  |
| 42 | 733  | 750  | 767  | 785  | 802  | 820  | 837  |
| 43 | 750  | 767  | 785  | 802  | 820  | 837  | 855  |
| 44 | 767  | 785  | 802  | 820  | 837  | 855  | 872  |
| 45 | 785  | 802  | 820  | 837  | 855  | 872  | 890  |
| 46 | 802  | 820  | 837  | 855  | 872  | 890  | 907  |
| 47 | 820  | 837  | 855  | 872  | 890  | 907  | 925  |
| 48 | 837  | 855  | 872  | 890  | 907  | 925  | 942  |
| 49 | 855  | 872  | 890  | 907  | 925  | 942  | 959  |
| 50 | 872  | 890  | 907  | 925  | 942  | 959  | 977  |
| 51 | 890  | 907  | 925  | 942  | 959  | 977  | 994  |
| 52 | 907  | 925  | 942  | 959  | 977  | 994  | 1012 |
| 53 | 925  | 942  | 959  | 977  | 994  | 1012 | 1029 |
| 54 | 942  | 959  | 977  | 994  | 1012 | 1029 | 1047 |
| 55 | 959  | 977  | 994  | 1012 | 1029 | 1047 |      |
| 56 | 977  | 994  | 1012 | 1029 | 1047 |      |      |
| 57 | 994  | 1012 | 1029 | 1047 |      |      |      |
| 58 | 1012 | 1029 | 1047 |      |      |      |      |
| 59 | 1029 | 1047 |      |      |      |      |      |
| 60 | 1047 |      |      |      |      |      |      |

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# Residuum Tabelle.

| h  | 6        | 7        | 8        | 9        | 10        | 11        |
|----|----------|----------|----------|----------|-----------|-----------|
| in | pres     | pres     | pres     | pres     | pres      | pres      |
| 1  | 6289 289 | 7329 289 | 8367 288 | 9403 287 | 10436 286 | 11465     |
| 2  | 6306     | 7346     | 8384     | 9420     | 10453     | 11482     |
| 3  | 6323     | 7364     | 8402     | 9437     | 10470     | 11499     |
| 4  | 6341     | 7381     | 8419     | 9455     | 10487     | 11517     |
| 5  | 6358     | 7398     | 8436     | 9472     | 10504     | 11534     |
| 6  | 6375     | 7416     | 8454     | 9489     | 10522     | 11551 285 |
| 7  | 6393     | 7433     | 8471     | 9506     | 10539     | 11568     |
| 8  | 6410     | 7450     | 8488     | 9523     | 10556     | 11585     |
| 9  | 6427     | 7468     | 8505     | 9541     | 10573     | 11602     |
| 10 | 6445     | 7485     | 8523     | 9558     | 10590     | 11619     |
| 11 | 6462     | 7502     | 8540     | 9575     | 10607     | 11636     |
| 12 | 6479     | 7519     | 8557     | 9592     | 10625     | 11654     |
| 13 | 6497     | 7537     | 8575     | 9610     | 10642     | 11671     |
| 14 | 6514     | 7554     | 8592     | 9627     | 10659     | 11688     |
| 15 | 6532     | 7571     | 8609     | 9644     | 10676     | 11705     |
| 16 | 6549     | 7589     | 8626     | 9661     | 10693     | 11722     |
| 17 | 6566     | 7606     | 8644     | 9679     | 10710     | 11739     |
| 18 | 6584     | 7623     | 8661     | 9696     | 10728     | 11756     |
| 19 | 6601     | 7641     | 8678     | 9713     | 10545     | 11773     |
| 20 | 6618     | 7658     | 8695     | 9730     | 10762     | 11791     |
| 21 | 6636     | 7675     | 8713     | 9747     | 10779     | 11808     |
| 22 | 6653     | 7693     | 8730     | 9765     | 10796     | 11825     |
| 23 | 6670     | 7710     | 8747     | 9782     | 10813     | 11842     |
| 24 | 6688     | 7727     | 8765     | 9799     | 10831     | 11859     |
| 25 | 6705     | 7745 288 | 8782     | 9816     | 10848     | 11876     |
| 26 | 6722     | 7762     | 8799     | 9833     | 10865     | 11893     |
| 27 | 6740     | 7779     | 8816     | 9851     | 10882     | 11910     |
| 28 | 6757     | 7796     | 8834     | 9868     | 10899     | 11927     |
| 29 | 6774     | 7814     | 8851     | 9885     | 10916     | 11944     |
| 30 | 6792     | 7831     | 8868     | 9902     | 10934     | 11962     |



Sinus recti.

| 6    | 7    | 8    | 9    | 10    | 11    |
|------|------|------|------|-------|-------|
| ptes | ptes | ptes | ptes | ptes  | ptes  |
| 31   | 6809 | 7848 | 8885 | 9920  | 10951 |
| 32   | 6826 | 7866 | 8903 | 9937  | 10968 |
| 33   | 6844 | 7883 | 8920 | 9954  | 10985 |
| 34   | 6861 | 7900 | 8937 | 9971  | 11002 |
| 35   | 6878 | 7918 | 8954 | 9988  | 11019 |
| 36   | 6896 | 7935 | 8972 | 10006 | 11037 |
| 37   | 6913 | 7952 | 8989 | 10023 | 11054 |
| 38   | 6930 | 7969 | 9006 | 10040 | 11071 |
| 39   | 6948 | 7987 | 9023 | 10057 | 11088 |
| 40   | 6965 | 8004 | 9041 | 10074 | 11105 |
| 41   | 6982 | 8021 | 9058 | 10092 | 11122 |
| 42   | 7000 | 8030 | 9075 | 10109 | 11139 |
| 43   | 7017 | 8056 | 9092 | 10126 | 11157 |
| 44   | 7034 | 8073 | 9110 | 10143 | 11174 |
| 45   | 7052 | 8091 | 9127 | 10160 | 11191 |
| 46   | 7069 | 8108 | 9144 | 10178 | 11208 |
| 47   | 7086 | 8125 | 9161 | 10195 | 11225 |
| 48   | 7104 | 8142 | 9179 | 10212 | 11242 |
| 49   | 7121 | 8160 | 9196 | 10229 | 11260 |
| 50   | 7138 | 8177 | 9213 | 10246 | 11277 |
| 51   | 7156 | 8194 | 9230 | 10264 | 11294 |
| 52   | 7173 | 8212 | 9248 | 10281 | 11311 |
| 53   | 7190 | 8229 | 9265 | 10298 | 11328 |
| 54   | 7208 | 8246 | 9282 | 10315 | 11345 |
| 55   | 7225 | 8263 | 9299 | 10332 | 11362 |
| 56   | 7242 | 8281 | 9317 | 10350 | 11380 |
| 57   | 7260 | 8298 | 9334 | 10367 | 11397 |
| 58   | 7277 | 8315 | 9351 | 10384 | 11414 |
| 59   | 7294 | 8333 | 9368 | 10401 | 11431 |
| 60   | 7312 | 8350 | 9386 | 10418 | 11448 |



# Residuum Tabelle

| 5   | 12    |     | 13    |     | 14    |     | 15    |     | 16    |     | 17        |
|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-----------|
| lin | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes      |
| 1   | 12491 |     | 13514 | 183 | 14532 | 282 | 15546 |     | 16555 |     | 17558     |
| 2   | 12508 |     | 13531 |     | 14549 |     | 15562 |     | 16571 |     | 17575     |
| 3   | 12525 |     | 13548 |     | 14566 |     | 15579 |     | 16588 |     | 17592     |
| 4   | 12542 |     | 13565 |     | 14583 |     | 15596 |     | 16605 |     | 17609     |
| 5   | 12560 |     | 13582 |     | 14599 |     | 15613 |     | 16622 | 279 | 17625     |
| 6   | 12577 | 248 | 13599 |     | 14616 |     | 15630 |     | 16638 |     | 17642     |
| 7   | 12594 |     | 13616 |     | 14633 |     | 15647 |     | 16655 |     | 17659     |
| 8   | 12611 |     | 13633 |     | 14650 |     | 15663 |     | 16672 |     | 17675     |
| 9   | 12628 |     | 13650 |     | 14667 |     | 15680 |     | 16689 |     | 17692     |
| 10  | 12645 |     | 13667 |     | 14684 |     | 15697 |     | 16705 |     | 17709     |
| 11  | 12662 |     | 13684 |     | 14701 |     | 15714 |     | 16722 |     | 17725     |
| 12  | 12679 |     | 13701 |     | 14718 |     | 15731 |     | 16739 |     | 17742     |
| 13  | 12696 |     | 13718 |     | 14735 |     | 15748 |     | 16756 |     | 17759     |
| 14  | 12713 |     | 13735 |     | 14752 |     | 15765 |     | 16772 |     | 17775     |
| 15  | 12730 |     | 13752 |     | 14769 |     | 15781 |     | 16789 |     | 17792     |
| 16  | 12747 |     | 13769 |     | 14786 |     | 15798 |     | 16806 |     | 17809     |
| 17  | 12764 |     | 13786 |     | 14803 |     | 15815 |     | 16823 |     | 17825     |
| 18  | 12781 |     | 13802 |     | 14819 |     | 15832 |     | 16840 |     | 17842     |
| 19  | 12798 |     | 13819 |     | 14836 |     | 15849 |     | 16856 |     | 17859     |
| 20  | 12815 |     | 13836 |     | 14853 |     | 15866 | 280 | 16873 |     | 17875     |
| 21  | 12832 |     | 13853 |     | 14850 |     | 15882 |     | 16890 |     | 17892     |
| 22  | 12850 |     | 13870 |     | 14887 |     | 15899 |     | 16907 |     | 17909     |
| 23  | 12867 |     | 13887 |     | 14904 |     | 15916 |     | 16923 |     | 17925     |
| 24  | 12884 |     | 13904 |     | 14921 |     | 15933 |     | 16940 |     | 17942     |
| 25  | 12901 |     | 13921 |     | 14938 |     | 15950 |     | 16957 |     | 17959     |
| 26  | 12918 |     | 13938 |     | 14955 |     | 15967 |     | 16973 |     | 17975     |
| 27  | 12935 |     | 13955 |     | 14972 |     | 15983 |     | 16990 |     | 17992     |
| 28  | 12952 |     | 13972 |     | 14989 |     | 16000 |     | 17007 |     | 18009     |
| 29  | 12969 |     | 13989 |     | 15005 |     | 16017 |     | 17024 |     | 18025     |
| 30  | 12986 |     | 14006 |     | 15022 |     | 16034 |     | 17040 |     | 18042 277 |



Sinus recti.

| 6  | 12    | 13        | 14        | 15    | 16        | 17    |
|----|-------|-----------|-----------|-------|-----------|-------|
| m  | ptes  | ptes      | ptes      | ptes  | ptes      | ptes  |
| 31 | 13003 | 14023     | 15039     | 16051 | 17057     | 18058 |
| 32 | 13020 | 14040     | 15056     | 16067 | 17074     | 18075 |
| 33 | 13037 | 14057     | 15073     | 16084 | 17091     | 18092 |
| 34 | 13054 | 14074     | 15090     | 16101 | 17107     | 18108 |
| 35 | 13071 | 14091     | 15107     | 16118 | 17124     | 18125 |
| 36 | 13088 | 14108     | 15124     | 16135 | 17141     | 18142 |
| 37 | 13105 | 14125     | 15141     | 16152 | 17158     | 18158 |
| 38 | 13122 | 14142     | 15157     | 16168 | 17174     | 18175 |
| 39 | 13139 | 14159     | 15174     | 16185 | 17191     | 18192 |
| 40 | 13156 | 14176     | 15191     | 16202 | 17208     | 18208 |
| 41 | 13173 | 14193     | 15208     | 16219 | 17224     | 18225 |
| 42 | 13190 | 14210     | 15225     | 16236 | 17241     | 18241 |
| 43 | 13207 | 14227     | 15252     | 16252 | 17258     | 18258 |
| 44 | 13224 | 14244     | 15259     | 16269 | 17275     | 18275 |
| 45 | 13241 | 14261     | 15276     | 16286 | 17291     | 18291 |
| 46 | 13258 | 14278     | 15292     | 16303 | 17308     | 18308 |
| 47 | 13275 | 14295     | 15309     | 16320 | 17325     | 18325 |
| 48 | 13292 | 14312     | 15326     | 16336 | 17341     | 18341 |
| 49 | 13309 | 14328     | 15343     | 16353 | 17358     | 18358 |
| 50 | 13326 | 14345     | 15360 281 | 16370 | 17375 278 | 18374 |
| 51 | 13343 | 14362     | 15377     | 16387 | 17392     | 18391 |
| 52 | 13360 | 14379     | 15394     | 16403 | 17408     | 18408 |
| 53 | 13377 | 14396     | 15411     | 16420 | 17425     | 18424 |
| 54 | 13395 | 14413     | 15427     | 16437 | 17442     | 18441 |
| 55 | 13412 | 14430     | 15444     | 16454 | 17458     | 18458 |
| 56 | 13429 | 14447     | 15461     | 16471 | 17475     | 18474 |
| 57 | 13446 | 14464     | 15478     | 16487 | 17492     | 18491 |
| 58 | 13463 | 14481     | 15495     | 16504 | 17508     | 18507 |
| 59 | 13480 | 14498     | 15512     | 16521 | 17525     | 18524 |
| 60 | 13497 | 14515 282 | 15529     | 16538 | 17542     | 18541 |



# Residuum Tabelle

| B  | 18        | 19        | 20        | 21        | 22        | 23    |
|----|-----------|-----------|-----------|-----------|-----------|-------|
| m  | pres      | pres      | pres      | pres      | pres      | pres  |
| 1  | 18557     | 19550     | 20537 273 | 21518     | 22492     | 23459 |
| 2  | 18574     | 19567     | 20554     | 21534     | 22508     | 23476 |
| 3  | 18590     | 19583     | 20570     | 21550     | 22524     | 23492 |
| 4  | 18607     | 19600     | 20586     | 21567     | 22541     | 23508 |
| 5  | 18624     | 19616     | 20603     | 21583 271 | 22557     | 23524 |
| 6  | 18640     | 19633     | 20619     | 21599     | 22573     | 23540 |
| 7  | 18657     | 19649     | 20635     | 21616     | 22589     | 23556 |
| 8  | 18673     | 19666     | 20652     | 21632     | 22605     | 23572 |
| 9  | 18690     | 19682     | 20668     | 21648     | 22621     | 23588 |
| 10 | 18706 276 | 19699     | 20685     | 21664     | 22638 269 | 23604 |
| 11 | 18723     | 19715     | 20701     | 21681     | 22654     | 23620 |
| 12 | 18740     | 19732     | 20717     | 21697     | 22670     | 23636 |
| 13 | 18756     | 19748     | 20734     | 21713     | 22686     | 23652 |
| 14 | 18773     | 19764     | 20750     | 21730     | 22702     | 23668 |
| 15 | 18789     | 19781     | 20767     | 21746     | 22718     | 23684 |
| 16 | 18806     | 19797     | 20783     | 21762     | 22735     | 23700 |
| 17 | 18822     | 19814     | 20799     | 21778     | 22751     | 23716 |
| 18 | 18839     | 19830     | 20816     | 21795     | 22767     | 23732 |
| 19 | 18856     | 19847     | 20832     | 21811     | 22783     | 23748 |
| 20 | 18872     | 19863 274 | 20848     | 21827     | 22799     | 23764 |
| 21 | 18889     | 19880     | 20865     | 21843     | 22815     | 23780 |
| 22 | 18905     | 19896     | 20881     | 21860     | 22831     | 23796 |
| 23 | 18932     | 19913     | 20897     | 21876     | 22848     | 23812 |
| 24 | 18938     | 19929     | 20914     | 21892     | 22864     | 23828 |
| 25 | 18955     | 19946     | 20930     | 21908     | 22880     | 23844 |
| 26 | 18972     | 19962     | 20947     | 21925     | 22896     | 23860 |
| 27 | 18988     | 19979     | 20963     | 21941     | 22912     | 23876 |
| 28 | 19005     | 19995     | 20979     | 21957     | 22928     | 23892 |
| 29 | 19021     | 20011     | 20996     | 21973     | 22944     | 23908 |
| 30 | 19038     | 20028     | 21012     | 21990     | 22961     | 23924 |



Sinus recti.

| 5  | 18        | 19    | 20        | 21        | 22        | 23        |
|----|-----------|-------|-----------|-----------|-----------|-----------|
| m  | ptes      | ptes  | ptes      | ptes      | ptes      | ptes      |
| 31 | 19054     | 20044 | 21028     | 22006     | 22977     | 23940     |
| 32 | 19071     | 20061 | 21045 272 | 22022     | 22993     | 23956     |
| 33 | 19087     | 20077 | 21061     | 22038     | 23009     | 23972     |
| 34 | 19104     | 20094 | 21077     | 22055     | 23025     | 23988     |
| 35 | 19121     | 20110 | 21094     | 22071     | 23041     | 24004     |
| 36 | 19137     | 20127 | 21110     | 22087     | 23057     | 24020     |
| 37 | 19154     | 20143 | 21126     | 22103 270 | 23073     | 24036     |
| 38 | 19170     | 20159 | 21143     | 22119     | 23089     | 24052     |
| 39 | 19187     | 20176 | 21159     | 22136     | 23106     | 24068 266 |
| 40 | 19203     | 20192 | 21175     | 22152     | 23122 268 | 24084     |
| 41 | 19220     | 20209 | 21192     | 22168     | 23138     | 24100     |
| 42 | 19236     | 20225 | 21208     | 22184     | 23154     | 24116     |
| 43 | 19253     | 20242 | 21224     | 22201     | 23170     | 24132     |
| 44 | 19269     | 20258 | 21241     | 22217     | 23186     | 24148     |
| 45 | 19286 275 | 20275 | 21257     | 22233     | 23202     | 24164     |
| 46 | 19302     | 20291 | 21273     | 22249     | 23218     | 24180     |
| 47 | 19319     | 20307 | 21290     | 22265     | 23234     | 24196     |
| 48 | 19335     | 20324 | 21306     | 22282     | 23250     | 24212     |
| 49 | 19352     | 20340 | 21322     | 22298     | 23267     | 24228     |
| 50 | 19368     | 20357 | 21339     | 22314     | 23283     | 24244     |
| 51 | 19385     | 20373 | 21355     | 22330     | 23299     | 24260     |
| 52 | 19402     | 20389 | 21371     | 22346     | 23315     | 24276     |
| 53 | 19418     | 20406 | 21387     | 22363     | 23331     | 24292     |
| 54 | 19435     | 20422 | 21404     | 22379     | 23347     | 24308     |
| 55 | 19451     | 20439 | 21420     | 22395     | 23363     | 24324     |
| 56 | 19468     | 20455 | 21436     | 22411     | 23379     | 24340     |
| 57 | 19484     | 20471 | 21453     | 22427     | 23395     | 24356     |
| 58 | 19501     | 20488 | 21469     | 22444     | 23411     | 24372     |
| 59 | 19517     | 20504 | 21485     | 22460     | 23427     | 24388     |
| 60 | 19534     | 20521 | 21502     | 22476     | 23443     | 24404     |

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# Residuum Tabelle

| B  | 24        | 25        | 26        | 27        | 28        | 29        |
|----|-----------|-----------|-----------|-----------|-----------|-----------|
| m  | ptis      | ptes      | ptes      | ptes      | ptes      | ptes      |
| 1  | 24420 289 | 25372     | 26317 261 | 27254     | 28183     | 29103 254 |
| 2  | 24436     | 25388     | 26333     | 27270     | 28199     | 29119     |
| 3  | 24452     | 25404     | 26349     | 27286     | 28214     | 29134     |
| 4  | 24467     | 25420     | 26365     | 27301     | 28229     | 29149     |
| 5  | 24483     | 25436     | 26380     | 27318     | 28245     | 29164     |
| 6  | 24499     | 25451 263 | 26396     | 27332     | 28260     | 29180     |
| 7  | 24515     | 25467     | 26412     | 27348     | 28276     | 29195     |
| 8  | 24531     | 25483     | 26427     | 27363     | 28291     | 29210     |
| 9  | 24547 265 | 25499     | 26443     | 27379     | 28306     | 29225     |
| 10 | 24563     | 25515     | 26459     | 27394     | 28322 256 | 29241     |
| 11 | 24579     | 25530     | 26474     | 27410     | 28337     | 29256     |
| 12 | 24595     | 25546     | 26490     | 27425     | 28353     | 29271     |
| 13 | 24611     | 25562     | 26506     | 27441     | 28368     | 29286     |
| 14 | 24627     | 25578     | 26521     | 27456     | 28383     | 29302     |
| 15 | 24643     | 25594     | 26537     | 27472     | 28399     | 29317     |
| 16 | 24659     | 25609     | 26552     | 27487     | 28414     | 29332     |
| 17 | 24674     | 25625     | 26568     | 27503     | 28429     | 29347     |
| 18 | 24690     | 25641     | 26584     | 27518     | 28445     | 29362     |
| 19 | 24706     | 25657     | 26599     | 27534     | 28460     | 29378     |
| 20 | 24722     | 25673     | 26615     | 27549 258 | 28476     | 29393     |
| 21 | 24738     | 25688     | 26631     | 27565     | 28491     | 29408     |
| 22 | 24754     | 25704     | 26646     | 27580     | 28506     | 29422     |
| 23 | 24770     | 25720     | 26662     | 27596     | 28522     | 29439     |
| 24 | 24786     | 25736     | 26678     | 27611     | 28537     | 29454     |
| 25 | 24802     | 25751     | 26693     | 27627     | 28552     | 29469     |
| 26 | 24818     | 25767     | 26709     | 27642     | 28568     | 29484     |
| 27 | 24833     | 25783     | 26725     | 27658     | 28582     | 29499     |
| 28 | 24849     | 25799     | 26740     | 27673     | 28598     | 29515     |
| 29 | 24865     | 25814     | 26756     | 27689     | 28614     | 29530     |
| 30 | 24881     | 25830     | 26771     | 27704     | 28629     | 29545     |



Sinus recti.

| 8  | 24    | 25    | 26    | 27    | 28    | 29    |
|----|-------|-------|-------|-------|-------|-------|
| m  | ptes  | ptes  | ptes  | ptes  | ptes  | ptes  |
| 31 | 24897 | 25846 | 26787 | 27720 | 28644 | 29560 |
| 32 | 24913 | 25862 | 26803 | 27735 | 28660 | 29575 |
| 33 | 24929 | 25877 | 26818 | 27751 | 28675 | 29590 |
| 34 | 24945 | 25893 | 26834 | 27766 | 28690 | 29606 |
| 35 | 24960 | 25909 | 26849 | 27782 | 28706 | 29621 |
| 36 | 24976 | 25925 | 26865 | 27797 | 28721 | 29637 |
| 37 | 24992 | 25940 | 26881 | 27813 | 28736 | 29651 |
| 38 | 25008 | 25956 | 26896 | 27828 | 28752 | 29666 |
| 39 | 25024 | 25972 | 26912 | 27844 | 28767 | 29682 |
| 40 | 25040 | 25988 | 26927 | 27859 | 28782 | 29697 |
| 41 | 25056 | 26003 | 26943 | 27875 | 28798 | 29712 |
| 42 | 25072 | 26019 | 26959 | 27890 | 28813 | 29727 |
| 43 | 25087 | 26035 | 26974 | 27905 | 28828 | 29742 |
| 44 | 25103 | 26051 | 26990 | 27921 | 28844 | 29757 |
| 45 | 25119 | 26066 | 27005 | 27936 | 28859 | 29772 |
| 46 | 25135 | 26082 | 27021 | 27952 | 28874 | 29788 |
| 47 | 25151 | 26098 | 27037 | 27967 | 28889 | 29803 |
| 48 | 25167 | 26113 | 27052 | 27983 | 28905 | 29818 |
| 49 | 25182 | 26129 | 27068 | 27998 | 28920 | 29833 |
| 50 | 25198 | 26145 | 27083 | 28014 | 28935 | 29848 |
| 51 | 25214 | 26161 | 27099 | 28029 | 28951 | 29863 |
| 52 | 25230 | 26176 | 27114 | 28044 | 28966 | 29878 |
| 53 | 25246 | 26292 | 27130 | 28060 | 28981 | 29894 |
| 54 | 25262 | 26208 | 27146 | 28075 | 28996 | 29909 |
| 55 | 25277 | 26223 | 27161 | 28091 | 29012 | 29924 |
| 56 | 25293 | 26239 | 27177 | 28106 | 29027 | 29939 |
| 57 | 25309 | 26255 | 27192 | 28122 | 29042 | 29954 |
| 58 | 25325 | 26270 | 27208 | 28137 | 29058 | 29969 |
| 59 | 25341 | 26286 | 27223 | 28152 | 29073 | 29984 |
| 60 | 25357 | 26302 | 27239 | 28168 | 29088 | 30000 |



# Residuum Tabelle

| B  | 30    | 31        | 32        | 33        | 34        | 35        |
|----|-------|-----------|-----------|-----------|-----------|-----------|
| m  | ptes  | ptes      | ptes      | ptes      | ptes      | ptes      |
| 1  | 30015 | 30917     | 249 31809 | 32692     | 33566     | 34428     |
| 2  | 30030 | 30932     | 31824     | 32707     | 33580     | 34443     |
| 3  | 30045 | 30947     | 31839     | 32722     | 33594     | 34457     |
| 4  | 30060 | 30962     | 31854     | 32736     | 33609     | 34471     |
| 5  | 30075 | 30977     | 31869     | 32751     | 33623     | 34486     |
| 6  | 30090 | 30992     | 31883     | 246 32766 | 33638     | 34500     |
| 7  | 30105 | 31006     | 31898     | 32780     | 33652     | 34514     |
| 8  | 30120 | 31021     | 31913     | 32795     | 33667     | 34528     |
| 9  | 30135 | 31036     | 31928     | 32809     | 33681     | 34543     |
| 10 | 30151 | 31051     | 31943     | 32824     | 33696     | 240 34557 |
| 11 | 30166 | 31066     | 31957     | 32839     | 33710     | 34571     |
| 12 | 30181 | 251 31086 | 31972     | 32853     | 243 33725 | 34585     |
| 13 | 30196 | 31096     | 31987     | 32868     | 33739     | 34600     |
| 14 | 30211 | 31111     | 32002     | 32882     | 33753     | 34614     |
| 15 | 30226 | 31126     | 32016     | 32897     | 33768     | 34628     |
| 16 | 30241 | 31141     | 32031     | 32912     | 33782     | 34642     |
| 17 | 30256 | 31156     | 32046     | 32926     | 33797     | 34657     |
| 18 | 30271 | 31171     | 32061     | 32941     | 33811     | 34671     |
| 19 | 30286 | 31186     | 32075     | 32955     | 33825     | 34685     |
| 20 | 30301 | 31200     | 248 32090 | 32970     | 33840     | 34699     |
| 21 | 30316 | 31215     | 32105     | 32985     | 33854     | 34714     |
| 22 | 30331 | 31230     | 32120     | 32999     | 33869     | 34728     |
| 23 | 30346 | 31245     | 32134     | 33014     | 33883     | 34742     |
| 24 | 30362 | 31260     | 32149     | 33028     | 33898     | 34756     |
| 25 | 30377 | 31275     | 32164     | 33043     | 33912     | 34771     |
| 26 | 30392 | 31290     | 32179     | 33057     | 33926     | 34785     |
| 27 | 30407 | 31305     | 32193     | 33072     | 33941     | 34799     |
| 28 | 30422 | 31320     | 32208     | 33087     | 33955     | 34813     |
| 29 | 30437 | 31335     | 32223     | 245 33101 | 33969     | 34827     |
| 30 | 30452 | 31349     | 32237     | 33116     | 33984     | 34842     |



Sinus recti.

| B  | 30    | 31    | 32    | 33    | 34    | 35    |
|----|-------|-------|-------|-------|-------|-------|
| m  | ptes  | ptes  | ptes  | ptes  | ptes  | ptes  |
| 31 | 30467 | 31364 | 32252 | 33130 | 33998 | 34856 |
| 32 | 30482 | 31379 | 32267 | 33145 | 34013 | 34870 |
| 33 | 30497 | 31394 | 32282 | 33159 | 34027 | 34884 |
| 34 | 30512 | 31409 | 32296 | 33174 | 34041 | 34898 |
| 35 | 30527 | 31424 | 32311 | 33188 | 34056 | 34913 |
| 36 | 30542 | 31439 | 32326 | 33203 | 34070 | 34927 |
| 37 | 30557 | 31454 | 32340 | 33218 | 34084 | 34941 |
| 38 | 30572 | 31468 | 32355 | 33232 | 34099 | 34955 |
| 39 | 30587 | 31483 | 32370 | 33247 | 34113 | 34969 |
| 40 | 30602 | 31498 | 32385 | 33261 | 34128 | 34984 |
| 41 | 30617 | 31513 | 32399 | 33276 | 34142 | 34998 |
| 42 | 30632 | 31528 | 32414 | 33290 | 34156 | 35012 |
| 43 | 30647 | 31543 | 32429 | 33305 | 34171 | 35026 |
| 44 | 30662 | 31557 | 32443 | 33319 | 34185 | 35040 |
| 45 | 30677 | 31572 | 32458 | 33334 | 34199 | 35054 |
| 46 | 30692 | 31587 | 32473 | 33348 | 34214 | 35069 |
| 47 | 30707 | 31602 | 32487 | 33363 | 34228 | 35083 |
| 48 | 30722 | 31617 | 32502 | 33377 | 34242 | 35097 |
| 49 | 30737 | 31632 | 32517 | 33392 | 34257 | 35111 |
| 50 | 30752 | 31647 | 32531 | 33406 | 34271 | 35125 |
| 51 | 30767 | 31661 | 32546 | 33421 | 34285 | 35139 |
| 52 | 30782 | 31676 | 32561 | 33435 | 34300 | 35154 |
| 53 | 30797 | 31691 | 32575 | 33450 | 34314 | 35168 |
| 54 | 30812 | 31706 | 32590 | 33464 | 34328 | 35182 |
| 55 | 30827 | 31721 | 32605 | 33479 | 34343 | 35196 |
| 56 | 30842 | 31735 | 32619 | 33493 | 34357 | 35210 |
| 57 | 30857 | 31750 | 32634 | 33508 | 34371 | 35224 |
| 58 | 30872 | 31765 | 32649 | 33522 | 34385 | 35238 |
| 59 | 30887 | 31780 | 32663 | 33537 | 34400 | 35253 |
| 60 | 30902 | 31795 | 32678 | 33551 | 34414 | 35267 |



# Residuum Tabelle

| B  | 36    |     | 37    |     | 38    |     | 39    |     | 40    |     | 41    |     |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| m  | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     |
| 1  | 35281 | 235 | 36122 |     | 36953 |     | 37772 |     | 38580 |     | 39376 | 219 |
| 2  | 35295 |     | 36136 |     | 36967 |     | 37786 |     | 38593 |     | 39389 |     |
| 3  | 35309 |     | 36150 |     | 36980 |     | 37799 |     | 38607 |     | 39403 |     |
| 4  | 35323 |     | 36164 |     | 36994 |     | 37813 |     | 38620 |     | 39416 |     |
| 5  | 35337 |     | 36178 |     | 37008 |     | 37827 |     | 38634 |     | 39429 |     |
| 6  | 35351 |     | 36192 |     | 37022 |     | 37846 |     | 38647 |     | 39442 |     |
| 7  | 35365 |     | 36206 |     | 37035 |     | 37854 |     | 38660 |     | 39455 |     |
| 8  | 35379 |     | 36220 |     | 37049 |     | 37867 |     | 38674 | 222 | 39468 |     |
| 9  | 35394 |     | 36234 |     | 37063 |     | 37881 |     | 38687 |     | 39481 |     |
| 10 | 35408 |     | 36248 |     | 37077 |     | 37894 |     | 38700 |     | 39495 |     |
| 11 | 35422 |     | 36262 |     | 37090 |     | 37908 |     | 38714 |     | 39508 |     |
| 12 | 35436 |     | 36275 |     | 37104 |     | 37921 | 225 | 38727 |     | 39521 |     |
| 13 | 35450 |     | 36289 |     | 37118 |     | 37935 |     | 38740 |     | 39534 |     |
| 14 | 35464 |     | 36303 |     | 37131 |     | 37948 |     | 38754 |     | 39547 |     |
| 15 | 35478 |     | 36317 |     | 37145 | 228 | 37962 |     | 38767 |     | 39560 |     |
| 16 | 35492 |     | 36331 |     | 37159 |     | 37975 |     | 38780 |     | 39573 |     |
| 17 | 35506 |     | 36345 |     | 37173 |     | 37989 |     | 38794 |     | 39586 |     |
| 18 | 35520 |     | 36359 |     | 37186 |     | 38002 |     | 38807 |     | 39600 |     |
| 19 | 35534 | 234 | 36373 | 231 | 37200 |     | 38016 |     | 38820 |     | 39613 |     |
| 20 | 35548 |     | 36387 |     | 37214 |     | 38029 |     | 38834 |     | 39626 | 218 |
| 21 | 35562 |     | 36400 |     | 37227 |     | 38043 |     | 38847 |     | 39639 |     |
| 22 | 35577 |     | 36414 |     | 37241 |     | 38056 |     | 38860 |     | 39652 |     |
| 23 | 35591 |     | 36438 |     | 37255 |     | 38070 |     | 38873 |     | 39665 |     |
| 24 | 35605 |     | 36442 |     | 37268 |     | 38083 |     | 38887 |     | 39678 |     |
| 25 | 35619 |     | 36456 |     | 37282 |     | 38097 |     | 38900 |     | 39691 |     |
| 26 | 35633 |     | 36470 |     | 37296 |     | 38110 |     | 38913 | 221 | 39704 |     |
| 27 | 35647 |     | 36484 |     | 37309 |     | 38124 |     | 38927 |     | 39717 |     |
| 28 | 35661 |     | 36497 |     | 37323 |     | 38137 |     | 38940 |     | 39731 |     |
| 29 | 35675 |     | 36511 |     | 37337 |     | 38151 |     | 38953 |     | 39744 |     |
| 30 | 35689 |     | 36525 |     | 37350 |     | 38164 | 224 | 38966 |     | 39757 |     |



Sinus recti.

| 36   | 37        | 38        | 39        | 40        | 41        |
|------|-----------|-----------|-----------|-----------|-----------|
| ptes | ptes      | ptes      | ptes      | ptes      | ptes      |
| 31   | 35703     | 36539     | 37364     | 38178 224 | 38980     |
| 32   | 35717     | 36553     | 37378     | 38191     | 38993     |
| 33   | 35731     | 36567     | 37391     | 38205     | 39006     |
| 34   | 35745     | 36581     | 37405     | 38218     | 39019     |
| 35   | 35759     | 36594     | 37419 227 | 38231     | 39033     |
| 36   | 35773     | 36608     | 37432     | 38245     | 39046     |
| 37   | 35787     | 36622 230 | 37446     | 38258     | 39059     |
| 38   | 35801 233 | 36636     | 37460     | 38272     | 39072     |
| 39   | 35815     | 36650     | 37473     | 38285     | 39086     |
| 40   | 35829     | 36664     | 37487     | 38299     | 39099     |
| 41   | 35843     | 36677     | 37500     | 38312     | 39112     |
| 42   | 35857     | 36691     | 37514     | 38326     | 39125     |
| 43   | 35871     | 36705     | 37528     | 38339     | 39139     |
| 44   | 35885     | 36719     | 37541     | 38352     | 39152     |
| 45   | 35899     | 36733     | 37555     | 38366     | 39165 220 |
| 46   | 35913     | 36746     | 37569     | 38379     | 39178     |
| 47   | 35927     | 36760     | 37582     | 38393     | 39192     |
| 48   | 35941     | 36774     | 37596     | 38406     | 39205     |
| 49   | 35955     | 36788     | 37609     | 38414     | 39218     |
| 50   | 35969     | 36802     | 37623     | 38433 223 | 39231     |
| 51   | 35983     | 36815     | 37637     | 38446     | 39244     |
| 52   | 35997     | 36829     | 37650     | 38460     | 39258     |
| 53   | 36011     | 36843     | 37664     | 38473     | 39271     |
| 54   | 36025     | 36857     | 37677 226 | 38486     | 39284     |
| 55   | 36039     | 36870     | 37691     | 38500     | 39297     |
| 56   | 36053     | 36884 229 | 37704     | 38513     | 39310     |
| 57   | 36067     | 36898     | 37718     | 38527     | 39324     |
| 58   | 36081 232 | 36912     | 37732     | 38540     | 39337     |
| 59   | 36094     | 36925     | 37745     | 38553     | 39350     |
| 60   | 36108     | 36939     | 37759     | 38567     | 39363     |



# Fefiduum Tabelle.

| d  | 42    |     | 43    |     | 44    |  | 45    |     | 46    |     | 47    |
|----|-------|-----|-------|-----|-------|--|-------|-----|-------|-----|-------|
| m  | ptes  |     | ptes  |     | ptes  |  | ptes  |     | ptes  |     | ptes  |
| 1  | 40160 |     | 40932 |     | 41692 |  | 42438 |     | 43172 |     | 43893 |
| 2  | 40173 |     | 40945 |     | 41704 |  | 42451 |     | 43184 |     | 43905 |
| 3  | 40186 |     | 40958 |     | 41717 |  | 42463 |     | 43196 |     | 43916 |
| 4  | 40199 |     | 40970 |     | 41729 |  | 42475 |     | 43208 |     | 43928 |
| 5  | 40212 |     | 40983 | 212 | 41742 |  | 42488 |     | 43220 | 205 | 43940 |
| 6  | 40225 |     | 40996 |     | 41754 |  | 42500 |     | 43233 |     | 43952 |
| 7  | 40238 |     | 41009 |     | 41767 |  | 42512 |     | 43245 |     | 43964 |
| 8  | 40251 |     | 41012 |     | 41779 |  | 42525 |     | 43257 |     | 43976 |
| 9  | 40264 |     | 41034 |     | 41792 |  | 42537 |     | 43269 |     | 43988 |
| 10 | 40277 |     | 41047 |     | 41804 |  | 42549 |     | 43281 |     | 44000 |
| 11 | 40290 |     | 41060 |     | 41817 |  | 42561 |     | 43293 |     | 44011 |
| 12 | 40303 |     | 41072 |     | 41829 |  | 42573 |     | 43305 |     | 44023 |
| 13 | 40316 |     | 41085 |     | 41842 |  | 42586 |     | 43317 |     | 44035 |
| 14 | 40329 |     | 41098 |     | 41854 |  | 42598 |     | 43329 |     | 44047 |
| 15 | 40342 |     | 41110 |     | 41867 |  | 42611 | 208 | 43341 |     | 44059 |
| 16 | 40354 | 215 | 41123 |     | 41879 |  | 42623 |     | 43353 |     | 44071 |
| 17 | 40367 |     | 41136 |     | 41892 |  | 42635 |     | 43365 |     | 44083 |
| 18 | 40380 |     | 41149 |     | 41904 |  | 42647 |     | 43378 |     | 44094 |
| 19 | 40393 |     | 41161 |     | 41917 |  | 42660 |     | 43390 |     | 44106 |
| 20 | 40406 |     | 41174 |     | 41929 |  | 42672 |     | 43402 |     | 44118 |
| 21 | 40419 |     | 41187 |     | 41942 |  | 42684 |     | 43414 | 204 | 44130 |
| 22 | 40432 |     | 41199 |     | 41954 |  | 42697 |     | 43426 |     | 44142 |
| 23 | 40445 |     | 41212 | 211 | 41967 |  | 42709 |     | 43438 |     | 44154 |
| 24 | 40458 |     | 41225 |     | 41979 |  | 42721 |     | 43450 |     | 44165 |
| 25 | 40471 |     | 41237 |     | 41992 |  | 42733 |     | 43462 |     | 44177 |
| 26 | 40483 |     | 41250 |     | 42004 |  | 42746 |     | 43474 |     | 44189 |
| 27 | 40496 |     | 41263 |     | 42017 |  | 42758 |     | 43486 |     | 44201 |
| 28 | 40509 |     | 41275 |     | 42029 |  | 42770 |     | 43498 |     | 44213 |
| 29 | 40522 |     | 41288 |     | 42042 |  | 42782 |     | 43510 |     | 44224 |
| 30 | 40535 |     | 41301 |     | 42054 |  | 42795 |     | 43522 |     | 44236 |



Sinus recti.

|    | 42    |     | 43    |     | 44    |     | 45    |     | 46    |     | 47    |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| in | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |
| 31 | 40548 | 214 | 41313 |     | 42066 | 207 | 42807 |     | 43534 |     | 44248 |
| 32 | 40561 |     | 41326 |     | 42079 |     | 42810 |     | 43546 |     | 44240 |
| 33 | 40574 |     | 41339 |     | 42091 |     | 42831 |     | 43558 |     | 44271 |
| 34 | 40586 |     | 41351 |     | 42104 |     | 42843 |     | 43570 |     | 44283 |
| 35 | 40599 |     | 41364 |     | 42116 |     | 42856 |     | 43582 |     | 44295 |
| 36 | 40612 |     | 41377 |     | 42129 |     | 42868 |     | 43594 |     | 44307 |
| 37 | 40625 |     | 41389 |     | 42141 |     | 42880 |     | 43606 |     | 44319 |
| 38 | 40638 |     | 41402 |     | 42154 |     | 42892 | 203 | 43618 |     | 44330 |
| 39 | 40651 |     | 41415 |     | 42166 |     | 42904 |     | 43630 |     | 44342 |
| 40 | 40663 |     | 41427 | 210 | 42178 |     | 42917 |     | 43642 |     | 44354 |
| 41 | 40676 |     | 41440 |     | 42191 |     | 42929 |     | 43654 |     | 44366 |
| 42 | 40689 |     | 41452 |     | 42203 |     | 42941 |     | 43666 |     | 44377 |
| 43 | 40702 | 213 | 41465 |     | 42216 |     | 42953 |     | 43678 |     | 44389 |
| 44 | 40715 |     | 41478 |     | 42228 |     | 42965 |     | 43690 | 199 | 44401 |
| 45 | 40728 |     | 41490 |     | 42240 |     | 42978 |     | 43702 |     | 44413 |
| 46 | 40740 |     | 41503 |     | 42253 |     | 42990 |     | 43714 |     | 44424 |
| 47 | 40753 |     | 41515 |     | 42265 |     | 43002 |     | 43726 |     | 44436 |
| 48 | 40766 |     | 41528 |     | 42278 | 206 | 43014 |     | 43738 |     | 44448 |
| 49 | 40779 |     | 41541 |     | 42290 |     | 43026 |     | 43750 |     | 44460 |
| 50 | 40792 |     | 41553 |     | 42302 |     | 43038 |     | 43762 |     | 44471 |
| 51 | 40804 |     | 41566 |     | 42315 |     | 43051 |     | 43773 |     | 44483 |
| 52 | 40817 |     | 41578 |     | 42327 |     | 43063 |     | 43785 |     | 44495 |
| 53 | 40830 |     | 41591 |     | 42339 |     | 43075 |     | 43797 |     | 44506 |
| 54 | 40843 |     | 41604 |     | 42352 |     | 43087 |     | 43809 |     | 44518 |
| 55 | 40856 |     | 41616 |     | 42364 |     | 43099 | 202 | 43821 |     | 44530 |
| 56 | 40868 |     | 41629 |     | 42377 |     | 43111 |     | 43833 |     | 44541 |
| 57 | 40881 |     | 41641 | 209 | 42389 |     | 43124 |     | 43845 |     | 44553 |
| 58 | 40893 |     | 41654 |     | 42401 |     | 43136 |     | 43857 |     | 44565 |
| 59 | 40907 |     | 41666 |     | 42414 |     | 43148 |     | 43869 |     | 44577 |
| 60 | 40919 |     | 41679 |     | 42426 |     | 43160 |     | 43881 |     | 44588 |



# Residuum Tabelle

| 5  | 48    |     | 49    |     | 50    |     | 51    |     | 52    |     | 53    |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| m  | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |
| 1  | 44600 |     | 45294 | 190 | 45975 |     | 46639 |     | 47291 |     | 47928 |
| 2  | 44612 |     | 45305 |     | 45985 |     | 46650 |     | 47302 |     | 47939 |
| 3  | 44623 |     | 45316 |     | 45996 |     | 46661 |     | 47312 |     | 47949 |
| 4  | 44635 | 194 | 45328 |     | 46007 |     | 46672 |     | 47323 |     | 47960 |
| 5  | 44647 |     | 45339 |     | 46018 |     | 46683 |     | 47334 |     | 47970 |
| 6  | 44658 |     | 45351 |     | 46029 |     | 46694 |     | 47345 |     | 47981 |
| 7  | 44670 |     | 45362 |     | 46041 |     | 46705 |     | 47355 |     | 47991 |
| 8  | 44681 |     | 45374 |     | 46052 |     | 46716 |     | 47366 |     | 48002 |
| 9  | 44693 |     | 45385 |     | 46063 | 186 | 46727 |     | 47377 |     | 48012 |
| 10 | 44705 |     | 45396 |     | 46074 |     | 46738 | 182 | 47387 | 178 | 48022 |
| 11 | 44716 |     | 45408 |     | 46085 |     | 46749 |     | 47398 |     | 48033 |
| 12 | 44728 |     | 45419 |     | 46097 |     | 46760 |     | 47409 |     | 48043 |
| 13 | 44740 |     | 45431 |     | 46108 |     | 46771 |     | 47419 |     | 48054 |
| 14 | 44751 |     | 45442 |     | 46119 |     | 46782 |     | 47430 |     | 48064 |
| 15 | 44763 |     | 45453 |     | 46130 |     | 46793 |     | 47441 |     | 48075 |
| 16 | 44775 |     | 45465 |     | 46141 |     | 46804 |     | 47452 |     | 48085 |
| 17 | 44786 |     | 45476 |     | 46152 |     | 46814 |     | 47462 |     | 47096 |
| 18 | 44798 |     | 45488 |     | 46163 |     | 46825 |     | 47473 |     | 48106 |
| 19 | 44809 |     | 45499 |     | 46175 |     | 46836 |     | 47484 |     | 48116 |
| 20 | 44821 | 193 | 45510 |     | 46186 |     | 46847 |     | 47494 |     | 48127 |
| 21 | 44833 |     | 45522 |     | 46197 |     | 46858 |     | 47505 |     | 48137 |
| 22 | 44844 |     | 45533 | 189 | 46208 |     | 46869 |     | 47516 |     | 48148 |
| 23 | 44856 |     | 45544 |     | 46219 | 185 | 46880 |     | 47526 |     | 48158 |
| 24 | 44867 |     | 45556 |     | 46230 |     | 46891 |     | 47537 |     | 48169 |
| 25 | 44879 |     | 45567 |     | 46241 |     | 46902 | 181 | 47547 | 177 | 48179 |
| 26 | 44891 |     | 45578 |     | 46253 |     | 46913 |     | 47558 |     | 48189 |
| 27 | 44902 |     | 45590 |     | 46264 |     | 46923 |     | 47569 |     | 48200 |
| 28 | 44914 |     | 45601 |     | 46275 |     | 46934 |     | 47579 |     | 48210 |
| 29 | 44925 |     | 45613 |     | 46286 |     | 46945 |     | 47589 |     | 48221 |
| 30 | 44937 |     | 45624 |     | 46297 |     | 46956 |     | 47600 |     | 48231 |



Sinus recti.

|    | 48    |     | 49    |     | 50    |     | 51    |     | 52    |     | 53    |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| m  | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |
| 31 | 44948 |     | 45635 |     | 46308 |     | 46967 |     | 47611 |     | 48241 |
| 32 | 44960 |     | 45647 |     | 46319 |     | 46978 |     | 47622 |     | 48252 |
| 33 | 44972 |     | 45658 |     | 46330 |     | 46989 |     | 47633 |     | 48262 |
| 34 | 44983 |     | 45669 |     | 46341 |     | 46999 |     | 47643 |     | 48272 |
| 35 | 44995 | 192 | 45680 |     | 46352 |     | 47010 |     | 47654 |     | 48283 |
| 36 | 45006 |     | 45692 |     | 46364 |     | 47021 |     | 47664 |     | 48293 |
| 37 | 45018 |     | 45703 |     | 46375 |     | 47032 |     | 47675 |     | 48303 |
| 38 | 45029 |     | 45714 | 188 | 46386 |     | 47043 |     | 47686 |     | 48314 |
| 39 | 45040 |     | 45726 |     | 46397 | 184 | 47054 |     | 47696 |     | 48324 |
| 40 | 45052 |     | 45737 |     | 46409 |     | 47064 | 180 | 47707 | 176 | 48335 |
| 41 | 45064 |     | 45748 |     | 46419 |     | 47074 |     | 47717 |     | 48345 |
| 42 | 45075 |     | 45760 |     | 46430 |     | 47086 |     | 47728 |     | 48355 |
| 43 | 45087 |     | 45771 |     | 46441 |     | 47097 |     | 47738 |     | 48366 |
| 44 | 45098 |     | 45782 |     | 46452 |     | 47108 |     | 47749 |     | 48376 |
| 45 | 45110 |     | 45793 |     | 46463 |     | 47119 |     | 47760 |     | 48386 |
| 46 | 45121 |     | 45805 |     | 46474 |     | 47129 |     | 47772 |     | 48390 |
| 47 | 45133 |     | 45816 |     | 46485 |     | 47140 |     | 47781 |     | 48407 |
| 48 | 45144 |     | 45827 |     | 46496 |     | 47151 |     | 47791 |     | 48417 |
| 49 | 45156 |     | 45839 |     | 46507 |     | 47163 |     | 47802 |     | 48427 |
| 50 | 45167 | 191 | 45850 |     | 46518 |     | 47172 |     | 47812 |     | 48438 |
| 51 | 45179 |     | 45861 |     | 46529 |     | 47183 |     | 47823 |     | 48448 |
| 52 | 45190 |     | 45873 |     | 46540 |     | 47194 |     | 47833 |     | 48458 |
| 53 | 45202 |     | 45884 | 187 | 46551 |     | 47205 |     | 47844 |     | 48469 |
| 54 | 45213 |     | 45895 |     | 46562 |     | 47216 |     | 47855 |     | 48479 |
| 55 | 45225 |     | 45906 |     | 46573 | 183 | 47226 | 179 | 47865 | 175 | 48489 |
| 56 | 45236 |     | 45917 |     | 46584 |     | 47237 |     | 47876 |     | 48499 |
| 57 | 45248 |     | 45928 |     | 46590 |     | 47248 |     | 47886 |     | 48510 |
| 58 | 45259 |     | 45940 |     | 46606 |     | 47259 |     | 47897 |     | 48520 |
| 59 | 45271 |     | 45951 |     | 46617 |     | 47269 |     | 47907 |     | 48530 |
| 60 | 45282 |     | 45962 |     | 46628 |     | 47280 |     | 47918 |     | 48541 |



# Residuum Tabelle.

| B. | 54    |     | 55    |     | 56    |     | 57    |     | 58    |     | 59    |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| n. | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |
| 1  | 48551 |     | 49159 |     | 49752 |     | 50329 | 158 | 50892 |     | 51439 |
| 2  | 48561 |     | 49169 |     | 49761 |     | 50339 |     | 50901 |     | 51448 |
| 3  | 48571 |     | 49179 |     | 49771 | 162 | 50348 |     | 50910 |     | 51456 |
| 4  | 48582 |     | 49189 |     | 49781 |     | 50358 |     | 50919 |     | 51465 |
| 5  | 48592 | 170 | 49199 |     | 49791 |     | 50367 |     | 50929 |     | 51474 |
| 6  | 48602 |     | 49209 | 166 | 49800 |     | 50377 |     | 50938 |     | 51483 |
| 7  | 48612 |     | 49219 |     | 49810 |     | 50386 |     | 50947 |     | 51492 |
| 8  | 48622 |     | 49229 |     | 49820 |     | 50396 |     | 50956 |     | 51501 |
| 9  | 48633 |     | 49239 |     | 49829 |     | 50405 |     | 50965 |     | 51510 |
| 10 | 48643 |     | 49249 |     | 49839 |     | 50415 |     | 50975 | 153 | 51519 |
| 11 | 48653 |     | 49258 |     | 49849 |     | 50424 |     | 50984 |     | 51528 |
| 12 | 48663 |     | 49268 |     | 49859 |     | 50434 |     | 50993 |     | 51537 |
| 13 | 48674 |     | 49278 |     | 49868 |     | 50443 |     | 51002 |     | 51546 |
| 14 | 48684 |     | 49288 |     | 49878 |     | 50452 |     | 51011 |     | 51555 |
| 15 | 48694 |     | 49298 |     | 49888 |     | 50462 | 157 | 51021 |     | 51564 |
| 16 | 48704 |     | 49308 |     | 49897 |     | 50471 |     | 51030 |     | 51573 |
| 17 | 48714 |     | 49318 |     | 49907 |     | 50481 |     | 51039 |     | 51582 |
| 18 | 48725 |     | 49328 |     | 49917 | 161 | 50490 |     | 51048 |     | 51591 |
| 19 | 48735 |     | 49338 |     | 49926 |     | 50500 |     | 51057 |     | 51600 |
| 20 | 48745 |     | 49348 |     | 49936 |     | 50519 |     | 51067 |     | 51608 |
| 21 | 48755 |     | 49358 | 165 | 49946 |     | 50518 |     | 51076 |     | 51617 |
| 22 | 48765 |     | 49368 |     | 49955 |     | 50528 |     | 51085 |     | 51626 |
| 23 | 48775 | 169 | 49378 |     | 49965 |     | 50537 |     | 51094 |     | 51635 |
| 24 | 48786 |     | 49388 |     | 49975 |     | 50547 |     | 51103 | 152 | 51644 |
| 25 | 48796 |     | 49398 |     | 49984 |     | 50556 |     | 51112 |     | 51653 |
| 26 | 48806 |     | 49408 |     | 49994 |     | 50565 |     | 51121 |     | 51662 |
| 27 | 48816 |     | 49417 |     | 50004 |     | 50575 | 156 | 51131 |     | 51671 |
| 28 | 48826 |     | 49427 |     | 50013 |     | 50584 |     | 51140 |     | 51680 |
| 29 | 48836 |     | 49437 |     | 50023 |     | 50594 |     | 51149 |     | 51688 |
| 30 | 48846 |     | 49447 |     | 50033 |     | 50603 |     | 51158 |     | 51697 |



Sinus recti.

| B    | 54    | 55    | 56    | 57    | 58    | 59    |
|------|-------|-------|-------|-------|-------|-------|
| pres | pres  | pres  | pres  | pres  | pres  | pres  |
| 31   | 48857 | 49457 | 50042 | 50612 | 51167 | 51706 |
| 32   | 48867 | 49467 | 50052 | 50622 | 51176 | 51715 |
| 33   | 48877 | 49477 | 50062 | 50631 | 51185 | 51724 |
| 34   | 48887 | 49487 | 50071 | 50640 | 51194 | 51733 |
| 35   | 48897 | 49496 | 50081 | 50650 | 51203 | 51741 |
| 36   | 48907 | 49506 | 50090 | 50658 | 51213 | 51750 |
| 37   | 48917 | 49516 | 50100 | 50668 | 51222 | 51759 |
| 38   | 48927 | 49526 | 50110 | 50678 | 51231 | 51768 |
| 39   | 48937 | 49536 | 50119 | 50687 | 51240 | 51777 |
| 40   | 48948 | 49546 | 50129 | 50697 | 51249 | 51786 |
| 41   | 48958 | 49556 | 50138 | 50706 | 51258 | 51794 |
| 42   | 48968 | 49565 | 50148 | 50715 | 51267 | 51803 |
| 43   | 48978 | 49575 | 50158 | 50725 | 51276 | 51812 |
| 44   | 48988 | 49585 | 50167 | 50734 | 51285 | 51821 |
| 45   | 48998 | 49595 | 50177 | 50743 | 51294 | 51830 |
| 46   | 49008 | 49605 | 50186 | 50752 | 51303 | 51838 |
| 47   | 49018 | 49615 | 50196 | 50762 | 51312 | 51847 |
| 48   | 49028 | 49624 | 50205 | 50771 | 51321 | 51856 |
| 49   | 49038 | 49634 | 50215 | 50780 | 51330 | 51865 |
| 50   | 49048 | 49644 | 50224 | 50790 | 51339 | 51874 |
| 51   | 49058 | 49654 | 50234 | 50799 | 51348 | 51882 |
| 52   | 49068 | 49664 | 50244 | 50808 | 51357 | 51891 |
| 53   | 49078 | 49673 | 50253 | 50818 | 51367 | 51900 |
| 54   | 49088 | 49683 | 50263 | 50827 | 51376 | 51909 |
| 55   | 49099 | 49693 | 50272 | 50836 | 51385 | 51917 |
| 56   | 49109 | 49703 | 50282 | 50845 | 51394 | 51926 |
| 57   | 49119 | 49712 | 50291 | 50855 | 51403 | 51935 |
| 58   | 49129 | 49722 | 50301 | 50864 | 51412 | 51944 |
| 59   | 49139 | 49732 | 50310 | 50873 | 51421 | 51952 |
| 60   | 49149 | 49742 | 50320 | 50882 | 51430 | 51961 |

DR I



# Residuum Tabelle

| 60           | 61        | 62        | 63        | 64        | 65        |
|--------------|-----------|-----------|-----------|-----------|-----------|
| ptes         | ptes      | ptes      | ptes      | ptes      | ptes      |
| 1 51970 145  | 52485     | 52985     | 53468     | 53935     | 54385     |
| 2 51978      | 52494     | 52993     | 53476     | 53942 127 | 54393     |
| 3 51987      | 52502     | 53001 136 | 53484     | 53950     | 54400     |
| 4 51996      | 52510     | 53009     | 53492     | 53958     | 54407     |
| 5 52005      | 52519     | 53017     | 53499     | 53965     | 54415     |
| 6 52013      | 52527     | 53025     | 53507     | 53973     | 54422     |
| 7 52022      | 52536     | 53034     | 53515     | 53981     | 54429     |
| 8 52031      | 52544     | 53042     | 53523     | 53988     | 54437 122 |
| 9 52039      | 52553 140 | 53050     | 53531 131 | 53996     | 54444     |
| 10 52048     | 52561     | 53058     | 53539     | 54003     | 54452     |
| 11 52057     | 52569     | 53066     | 53547     | 54011     | 54459     |
| 12 52065     | 52578     | 53074     | 53555     | 54019     | 54466     |
| 13 52074     | 52586     | 53083     | 53563     | 54026     | 54473     |
| 14 52083 144 | 52595     | 53091     | 53570     | 54034     | 54481     |
| 15 52091     | 52603     | 53099 135 | 53578     | 54041 126 | 54488     |
| 16 52100     | 52611     | 53107     | 53586     | 54049     | 54495     |
| 17 52109     | 52620     | 53115     | 53594     | 54057     | 54503     |
| 18 52117     | 52628     | 53123     | 53602     | 54064     | 54510     |
| 19 52126     | 52637     | 53131     | 53610     | 54072     | 54517     |
| 20 52135     | 52645     | 53139     | 53617     | 54079     | 54525 128 |
| 21 52143     | 52653     | 53147     | 53625     | 54087     | 54532     |
| 22 52152     | 52662     | 53156     | 53633 130 | 54094     | 54539     |
| 23 52161     | 52670 139 | 53164     | 53641     | 54102     | 54546     |
| 24 52169     | 52678     | 53172     | 53649     | 54109     | 54554     |
| 25 52178     | 52687     | 53180     | 53657     | 54117     | 54561     |
| 26 52186     | 52695     | 53188     | 53664     | 54125     | 54568     |
| 27 52195 143 | 52704     | 53196     | 53672     | 54132 125 | 54575     |
| 28 52204     | 52712     | 53204     | 53680     | 54140     | 54583     |
| 29 52212     | 52720     | 53212 134 | 53688     | 54147     | 54590     |
| 30 52221     | 52729     | 53220     | 53696     | 54155     | 54597     |



Sinus recti.

| S   | 60        | 61        | 62        | 63        | 64        | 65        |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|
| iii | ptes      | ptes      | ptes      | ptes      | ptes      | ptes      |
| 31  | 52229     | 52737     | 53228     | 53703     | 54162     | 54604     |
| 32  | 52238     | 52745     | 53236     | 53711     | 54170     | 54612     |
| 33  | 52247     | 52754     | 53244     | 53719     | 54177     | 54619 120 |
| 34  | 52255     | 52762     | 53252     | 53727     | 54185     | 54626     |
| 35  | 52264     | 52770     | 53260     | 53734 129 | 54192     | 54633     |
| 36  | 52272     | 52778     | 53268     | 53742     | 54200     | 54641     |
| 37  | 52281     | 52787     | 53276     | 53750     | 54207     | 54648     |
| 38  | 52289     | 52795     | 53284     | 53758     | 54215     | 54655     |
| 39  | 52298     | 52803     | 53293     | 53765     | 54222     | 54662     |
| 40  | 52307     | 52812     | 53301     | 53773     | 54230 124 | 54669     |
| 41  | 52315 142 | 52820     | 53308     | 53781     | 54237     | 54677     |
| 42  | 52324     | 52828     | 53317 133 | 53789     | 54244     | 54684     |
| 43  | 52332     | 52836     | 53325     | 53796     | 54252     | 54691     |
| 44  | 52341     | 52845     | 53333     | 53804     | 54259     | 54698     |
| 45  | 52349     | 52853     | 53341     | 53812     | 54267     | 54705     |
| 46  | 52358     | 52861     | 53349     | 53820     | 54274     | 54712     |
| 47  | 52366     | 52869     | 53357     | 53827     | 54282     | 54720     |
| 48  | 52375     | 52878     | 53364     | 53835 128 | 54289     | 54727     |
| 49  | 52383     | 52886 137 | 53372     | 53843     | 54297     | 54734     |
| 50  | 52392     | 52894     | 53380     | 53850     | 54304     | 54741     |
| 51  | 52400     | 52902     | 53388     | 53858     | 54311     | 54748     |
| 52  | 52409     | 52911     | 53396     | 53866     | 54319     | 54755     |
| 53  | 52417     | 52919     | 53404     | 53873     | 54326     | 54762     |
| 54  | 52426     | 52927     | 53412     | 53881     | 54334 123 | 54770     |
| 55  | 52434 141 | 52935     | 53420 132 | 53889     | 54341     | 54770     |
| 56  | 52443     | 52944     | 53428     | 53897     | 54348     | 54784     |
| 57  | 52451     | 52952     | 53436     | 53904     | 54356     | 54791     |
| 58  | 52460     | 52960     | 53444     | 53912     | 54363     | 54798     |
| 59  | 52468     | 52968     | 53452     | 53919     | 54371     | 54805     |
| 60  | 52477     | 52976     | 53460     | 53927     | 54378     | 54812     |

DR 2



# Residuum Labelle

| B  | 66    |     | 67    |     | 68    |     | 69    |     | 70    |    | 71    |
|----|-------|-----|-------|-----|-------|-----|-------|-----|-------|----|-------|
| m  | ptes  |     | ptes  |     | ptes  |     | ptes  |     | ptes  |    | ptes  |
| 1  | 54819 | 118 | 55237 |     | 55637 |     | 56021 |     | 56387 | 99 | 56736 |
| 2  | 54826 |     | 55244 |     | 55644 |     | 56027 |     | 56393 |    | 56742 |
| 3  | 54834 |     | 55250 | 113 | 55650 |     | 56033 |     | 56399 |    | 56748 |
| 4  | 54841 |     | 55257 |     | 55657 |     | 56039 |     | 56405 |    | 56753 |
| 5  | 54848 |     | 55264 |     | 55663 |     | 56046 |     | 56411 |    | 56759 |
| 6  | 54855 |     | 55271 |     | 55670 |     | 56052 |     | 56417 |    | 56765 |
| 7  | 54862 |     | 55277 |     | 55676 |     | 56058 |     | 56423 |    | 56770 |
| 8  | 54869 |     | 55284 |     | 55683 | 108 | 56064 |     | 56429 |    | 56776 |
| 9  | 54876 |     | 55291 |     | 55689 |     | 56070 |     | 56435 |    | 56782 |
| 10 | 54883 |     | 55298 |     | 55696 |     | 56077 |     | 56441 |    | 56787 |
| 11 | 54890 |     | 55305 |     | 55702 |     | 56083 | 103 | 56446 |    | 56793 |
| 12 | 54897 | 117 | 55311 |     | 55709 |     | 56089 |     | 56452 |    | 56798 |
| 13 | 54904 |     | 55318 |     | 55715 |     | 56095 |     | 56458 | 98 | 56804 |
| 14 | 54911 |     | 55325 |     | 55722 |     | 56101 |     | 56464 |    | 56810 |
| 15 | 54918 |     | 55332 |     | 55728 |     | 56108 |     | 56470 |    | 56815 |
| 16 | 54925 |     | 55338 | 112 | 55735 |     | 56114 |     | 56476 |    | 56821 |
| 17 | 54932 |     | 55345 |     | 55741 |     | 56120 |     | 56482 |    | 56827 |
| 18 | 54939 |     | 55352 |     | 55747 |     | 56126 |     | 56488 |    | 56832 |
| 19 | 54946 |     | 55359 |     | 55754 |     | 56132 |     | 56494 |    | 56838 |
| 20 | 54953 |     | 55365 |     | 55760 | 107 | 56138 |     | 56499 |    | 56843 |
| 21 | 54960 |     | 55372 |     | 55767 |     | 56145 |     | 56505 |    | 56849 |
| 22 | 54967 |     | 55379 |     | 55773 |     | 56151 |     | 56511 |    | 56854 |
| 23 | 54974 |     | 55385 |     | 55780 |     | 56157 | 102 | 56517 |    | 56860 |
| 24 | 54981 |     | 55392 |     | 55786 |     | 56163 |     | 56523 |    | 56866 |
| 25 | 54988 | 116 | 55399 |     | 55793 |     | 56169 |     | 56529 |    | 56871 |
| 26 | 54995 |     | 55406 |     | 55799 |     | 56175 |     | 56535 | 97 | 56877 |
| 27 | 55002 |     | 55412 |     | 55805 |     | 56181 |     | 56540 |    | 56882 |
| 28 | 55009 |     | 55419 |     | 55812 |     | 56188 |     | 56546 |    | 56888 |
| 29 | 55016 |     | 55426 | 111 | 55818 |     | 56194 |     | 56552 |    | 56893 |
| 30 | 55023 |     | 55432 |     | 55825 |     | 56200 |     | 56558 |    | 56899 |



Sinus recti.

| 66   | 67        | 68        | 69        | 70        | 71       |
|------|-----------|-----------|-----------|-----------|----------|
| ptes | ptes      | ptes      | ptes      | ptes      | ptes     |
| 31   | 55030     | 55439     | 55831     | 56206     | 56564    |
| 32   | 55037     | 55446     | 55837 106 | 56212     | 56570    |
| 33   | 55044     | 55452     | 55844     | 56218     | 56575    |
| 34   | 55051     | 55459     | 55850     | 56224     | 56581    |
| 35   | 55058     | 55466     | 55856     | 56230     | 56587    |
| 36   | 55065     | 55472     | 55866     | 56236 101 | 56593    |
| 37   | 55072 115 | 55479     | 55869     | 56243     | 56599    |
| 38   | 55079     | 55486     | 55876     | 56249     | 56604    |
| 39   | 55086     | 55492     | 55882     | 56255     | 56610 96 |
| 40   | 55092     | 55499     | 55888     | 56261     | 56616    |
| 41   | 55099     | 55505     | 55895     | 56267     | 56622    |
| 42   | 55106     | 55512 110 | 55901     | 56273     | 56628    |
| 43   | 55113     | 55519     | 55907     | 56279     | 56633    |
| 44   | 55120     | 55525     | 55914     | 56285     | 56639    |
| 45   | 55127     | 55532     | 55920 105 | 56291     | 56645    |
| 46   | 55134     | 55539     | 55926     | 56297     | 56651    |
| 47   | 55141     | 55545     | 55933     | 56303     | 56656    |
| 48   | 55148     | 55552     | 55939     | 56309 100 | 56662    |
| 49   | 55154     | 55558     | 55945     | 56315     | 56668    |
| 50   | 55161 114 | 55565     | 55952     | 56321     | 56674    |
| 51   | 55168     | 55571     | 55958     | 56327     | 56679 95 |
| 52   | 55175     | 55578     | 55964     | 56333     | 56685    |
| 53   | 55182     | 55585     | 55970     | 56339     | 56691    |
| 54   | 55189     | 55591     | 55977     | 56345     | 56696    |
| 55   | 55196     | 55598     | 55983     | 56351     | 56702    |
| 56   | 55202     | 55604     | 55989     | 56357     | 56708    |
| 57   | 55209     | 55611     | 55996     | 56363     | 56714    |
| 58   | 55216     | 55617 109 | 56002 104 | 56369     | 56719    |
| 59   | 55223     | 55624     | 56008     | 56375     | 56725    |
| 60   | 55230     | 55631     | 56014     | 56381     | 56731    |

D R 3



# Residuum Labelle

| B  | 72    |    | 73    |    | 74    |    | 75    |    | 76    |    | 77       |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|----------|
| m  | ptes  |    | ptes  |    | ptes  |    | ptes  |    | ptes  |    | ptes     |
| 1  | 57068 |    | 57383 |    | 57680 |    | 57960 |    | 58221 | 70 | 58466 65 |
| 2  | 57074 |    | 57388 |    | 57685 |    | 57964 |    | 58226 |    | 58470    |
| 3  | 57079 |    | 57393 |    | 57690 |    | 57969 |    | 58230 |    | 58473    |
| 4  | 57084 |    | 57398 |    | 57694 |    | 57973 |    | 58234 |    | 58477    |
| 5  | 57090 |    | 57403 |    | 57699 |    | 57978 |    | 58238 |    | 58481    |
| 6  | 57095 | 89 | 57408 |    | 57704 |    | 57982 |    | 58242 |    | 58485    |
| 7  | 57101 |    | 57413 |    | 57709 |    | 57987 |    | 58247 |    | 58489    |
| 8  | 57106 |    | 57418 | 84 | 57714 |    | 57991 |    | 58251 |    | 58493    |
| 9  | 57111 |    | 57424 |    | 57718 |    | 57996 |    | 58255 |    | 58497    |
| 10 | 57117 |    | 57429 |    | 57723 | 79 | 58000 | 74 | 58259 |    | 58501    |
| 11 | 57122 |    | 57434 |    | 57728 |    | 58004 |    | 58263 |    | 58505    |
| 12 | 57127 |    | 57439 |    | 57733 |    | 58009 |    | 58268 | 69 | 58508 64 |
| 13 | 57133 |    | 57444 |    | 57737 |    | 58013 |    | 58272 |    | 58512    |
| 14 | 57138 |    | 57449 |    | 57742 |    | 58018 |    | 58276 |    | 58516    |
| 15 | 57143 |    | 57454 |    | 57747 |    | 58022 |    | 58280 |    | 58520    |
| 16 | 57149 |    | 57459 |    | 57752 |    | 58027 |    | 58284 |    | 58524    |
| 17 | 57154 |    | 57464 |    | 57756 |    | 58031 |    | 58288 |    | 58528    |
| 18 | 57159 | 88 | 57469 |    | 57761 |    | 58036 |    | 58292 |    | 58532    |
| 19 | 57165 |    | 57474 |    | 57766 |    | 58040 |    | 58297 |    | 58535    |
| 20 | 57170 |    | 57479 | 83 | 57770 |    | 58044 |    | 58301 |    | 58539    |
| 21 | 57175 |    | 57484 |    | 57775 |    | 58049 |    | 58305 |    | 58543    |
| 22 | 57180 |    | 57489 |    | 57780 | 78 | 58053 |    | 58309 |    | 58547    |
| 23 | 57186 |    | 57494 |    | 57785 |    | 58058 | 73 | 58313 |    | 58551    |
| 24 | 57191 |    | 57499 |    | 57789 |    | 58062 |    | 58317 | 68 | 58555    |
| 25 | 57196 |    | 57504 |    | 57794 |    | 58066 |    | 58321 |    | 58558 63 |
| 26 | 57201 |    | 57509 |    | 57799 |    | 58071 |    | 58325 |    | 58562    |
| 27 | 57207 |    | 57514 |    | 57803 |    | 58075 |    | 58329 |    | 58566    |
| 28 | 57212 |    | 57519 |    | 57808 |    | 58080 |    | 58334 |    | 58570    |
| 29 | 57217 |    | 57524 |    | 57813 |    | 58084 |    | 58338 |    | 58573    |
| 30 | 57222 | 87 | 57529 |    | 57817 |    | 58088 |    | 58342 |    | 58577    |



Sinus recti.

| 5  | 72    | 73    | 74    | 75    | 76    | 77    |
|----|-------|-------|-------|-------|-------|-------|
| m  | ptes  | ptes  | ptes  | ptes  | ptes  | ptes  |
| 31 | 57228 | 57534 | 57822 | 58093 | 58346 | 58581 |
| 32 | 57233 | 57539 | 57827 | 58097 | 58350 | 58585 |
| 33 | 57238 | 57544 | 57831 | 58101 | 58354 | 58589 |
| 34 | 57243 | 57548 | 57836 | 58106 | 58358 | 58592 |
| 35 | 57249 | 57553 | 57841 | 58110 | 58362 | 58596 |
| 36 | 57254 | 57558 | 57845 | 58114 | 58366 | 58600 |
| 37 | 57259 | 57563 | 57850 | 58119 | 58370 | 58604 |
| 38 | 57264 | 57568 | 57854 | 58123 | 58374 | 58607 |
| 39 | 57270 | 57573 | 57859 | 58127 | 58378 | 58611 |
| 40 | 57275 | 57578 | 57864 | 58132 | 58382 | 58615 |
| 41 | 57280 | 57583 | 57868 | 58136 | 58386 | 58619 |
| 42 | 57285 | 57588 | 57873 | 58140 | 58390 | 58622 |
| 43 | 57290 | 57593 | 57878 | 58145 | 58394 | 58626 |
| 44 | 57296 | 57598 | 57882 | 58149 | 58398 | 58630 |
| 45 | 57301 | 57602 | 57887 | 58153 | 58402 | 58633 |
| 46 | 57306 | 57607 | 57891 | 58158 | 58406 | 58637 |
| 47 | 57311 | 57612 | 57896 | 58162 | 58410 | 58641 |
| 48 | 57316 | 57617 | 57900 | 58166 | 58414 | 58644 |
| 49 | 57321 | 57622 | 57905 | 58170 | 58418 | 58648 |
| 50 | 57327 | 57627 | 57910 | 58175 | 58422 | 58652 |
| 51 | 57332 | 57632 | 57914 | 58179 | 58426 | 58656 |
| 52 | 57337 | 57637 | 57919 | 58183 | 58430 | 58659 |
| 53 | 57342 | 57641 | 57923 | 58188 | 58434 | 58663 |
| 54 | 57347 | 57646 | 57928 | 58192 | 58438 | 58667 |
| 55 | 57352 | 57651 | 57932 | 58196 | 58442 | 58670 |
| 56 | 57357 | 57656 | 57937 | 58200 | 58446 | 58674 |
| 57 | 57362 | 57661 | 57941 | 58205 | 58450 | 58677 |
| 58 | 57368 | 57666 | 57946 | 58209 | 58454 | 58681 |
| 59 | 57373 | 57670 | 57951 | 58213 | 58458 | 58685 |
| 60 | 57378 | 57675 | 57955 | 58217 | 58462 | 58688 |



# Residuum Tabelle.

| D  | 78    |    | 79    |    | 80    |    | 81    |    | 82    |    | 83    |    |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|
| m  | ptes  |    | ptes  |    | ptes  |    | ptes  |    | ptes  |    | ptes  |    |
| 1  | 58692 | 60 | 58900 |    | 59091 |    | 59264 |    | 59418 | 40 | 59554 | 35 |
| 2  | 58696 |    | 58904 | 55 | 59094 | 50 | 59267 |    | 59420 |    | 59557 |    |
| 3  | 58699 |    | 59007 |    | 59097 |    | 59269 | 45 | 59423 |    | 59559 |    |
| 4  | 58703 |    | 59010 |    | 59100 |    | 59272 |    | 59425 |    | 59561 |    |
| 5  | 58706 |    | 58914 |    | 59103 |    | 59274 |    | 59428 |    | 59563 |    |
| 6  | 58710 |    | 58917 |    | 59106 |    | 59277 |    | 59430 |    | 59565 |    |
| 7  | 58714 |    | 58920 |    | 59109 |    | 59280 |    | 59432 |    | 59567 |    |
| 8  | 58717 |    | 58924 |    | 59112 |    | 59282 |    | 59435 |    | 59569 |    |
| 9  | 58721 |    | 58927 |    | 59115 |    | 59285 |    | 59437 |    | 59571 |    |
| 10 | 58724 |    | 58930 |    | 59118 |    | 59288 |    | 59440 |    | 59573 |    |
| 11 | 58728 |    | 58933 |    | 59121 |    | 59291 |    | 59442 |    | 59575 |    |
| 12 | 58732 |    | 58937 |    | 59124 |    | 59293 |    | 59444 |    | 59577 | 34 |
| 13 | 58735 | 59 | 58940 | 54 | 59127 | 49 | 59296 | 44 | 59447 | 39 | 59579 |    |
| 14 | 58739 |    | 58943 |    | 59130 |    | 59299 |    | 59449 |    | 59582 |    |
| 15 | 58742 |    | 58947 |    | 59133 |    | 59301 |    | 59451 |    | 59584 |    |
| 16 | 58746 |    | 58950 |    | 59136 |    | 59304 |    | 59454 |    | 59586 |    |
| 17 | 58749 |    | 58953 |    | 59139 |    | 59306 |    | 59456 |    | 59588 |    |
| 18 | 58753 |    | 58956 |    | 59142 |    | 59309 |    | 59458 |    | 59590 |    |
| 19 | 58756 |    | 58960 |    | 59145 |    | 59312 |    | 59461 |    | 59592 |    |
| 20 | 58760 |    | 58963 |    | 59148 |    | 59314 |    | 59463 |    | 59594 |    |
| 21 | 58763 |    | 58966 |    | 59151 |    | 59317 |    | 59465 |    | 59596 |    |
| 22 | 58767 |    | 58969 |    | 59153 |    | 59320 |    | 59468 |    | 59598 |    |
| 23 | 58771 |    | 58972 |    | 59156 |    | 59322 |    | 59470 |    | 59600 |    |
| 24 | 58774 |    | 58976 |    | 59159 |    | 59325 |    | 59472 |    | 59602 |    |
| 25 | 58778 | 58 | 58979 | 53 | 59162 | 48 | 59327 | 43 | 59475 | 38 | 59604 | 33 |
| 26 | 58781 |    | 58982 |    | 59165 |    | 59330 |    | 59477 |    | 59606 |    |
| 27 | 58785 |    | 58985 |    | 59168 |    | 59333 |    | 59479 |    | 59608 |    |
| 28 | 58788 |    | 58989 |    | 59171 |    | 59335 |    | 59482 |    | 59610 |    |
| 29 | 58792 |    | 58992 |    | 59174 |    | 59338 |    | 59484 |    | 59612 |    |
| 30 | 58795 |    | 58995 |    | 59177 |    | 59340 |    | 59486 |    | 59614 |    |



Sinus recti.

| 78   | 79    | 80    | 81    | 82    | 83    |
|------|-------|-------|-------|-------|-------|
| ptes | ptes  | ptes  | ptes  | ptes  | ptes  |
| 31   | 58798 | 58998 | 59080 | 59343 | 59488 |
| 32   | 58802 | 59001 | 59082 | 59346 | 59491 |
| 33   | 58805 | 59004 | 59085 | 59348 | 59493 |
| 34   | 58809 | 59007 | 59088 | 59351 | 59495 |
| 35   | 58812 | 59011 | 59091 | 59353 | 59498 |
| 36   | 58816 | 59014 | 59094 | 59356 | 59500 |
| 37   | 58819 | 59017 | 59097 | 59358 | 59502 |
| 38   | 58823 | 59020 | 59100 | 59361 | 59504 |
| 39   | 58826 | 59023 | 59102 | 59363 | 59506 |
| 40   | 58830 | 59026 | 59105 | 59366 | 59509 |
| 41   | 58833 | 59029 | 59108 | 59369 | 59511 |
| 42   | 58836 | 59033 | 59111 | 59371 | 59513 |
| 43   | 58840 | 59036 | 59114 | 59374 | 59515 |
| 44   | 58843 | 59039 | 59116 | 59376 | 59518 |
| 45   | 58847 | 59042 | 59119 | 59379 | 59520 |
| 46   | 58850 | 59045 | 59122 | 59381 | 59522 |
| 47   | 58853 | 59048 | 59125 | 59384 | 59524 |
| 48   | 58857 | 59051 | 59128 | 59386 | 59526 |
| 49   | 58860 | 59054 | 59130 | 59389 | 59529 |
| 50   | 58864 | 59057 | 59133 | 59391 | 59531 |
| 51   | 58867 | 59060 | 59136 | 59394 | 59533 |
| 52   | 58870 | 59064 | 59139 | 59396 | 59535 |
| 53   | 58874 | 59067 | 59142 | 59398 | 59537 |
| 54   | 58877 | 59070 | 59144 | 59401 | 59539 |
| 55   | 58880 | 59073 | 59147 | 59403 | 59542 |
| 56   | 58884 | 59076 | 59150 | 59406 | 59544 |
| 57   | 58887 | 59079 | 59153 | 59408 | 59546 |
| 58   | 58890 | 59082 | 59155 | 59411 | 59548 |
| 59   | 58894 | 59085 | 59158 | 59413 | 59550 |
| 60   | 58897 | 59088 | 59161 | 59416 | 59552 |



# Complementū Tabellæ

| m  | 84    |    | 85    |    | 86    |    | 87    |    | 88    |    | 89    |   |
|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|---|
|    | pres  |    | pres  |    | pres  |    | pres  |    | pres  |    | pres  |   |
| 1  | 59673 | 30 | 59773 | 25 | 59855 | 20 | 59918 | 15 | 59964 | 10 | 59991 | 5 |
| 2  | 59674 |    | 59774 |    | 59856 |    | 59919 |    | 59964 |    | 59991 |   |
| 3  | 59676 |    | 59776 |    | 59857 |    | 59920 |    | 59965 |    | 59991 |   |
| 4  | 59678 |    | 59777 |    | 59858 |    | 59921 |    | 59965 |    | 59992 |   |
| 5  | 59680 |    | 59779 |    | 59859 |    | 59922 |    | 59966 |    | 59992 |   |
| 6  | 59682 |    | 59780 |    | 59861 |    | 59923 |    | 59967 |    | 59992 |   |
| 7  | 59683 |    | 59782 |    | 59862 |    | 59924 |    | 59967 |    | 59992 |   |
| 8  | 59685 |    | 59783 |    | 59863 |    | 59924 |    | 59968 |    | 59993 |   |
| 9  | 59687 |    | 59785 |    | 59864 |    | 59925 |    | 59968 | 9  | 59993 | 4 |
| 10 | 59689 |    | 59786 |    | 59865 | 19 | 59926 | 14 | 59969 |    | 59993 |   |
| 11 | 59691 |    | 59788 | 24 | 59866 |    | 59927 |    | 59969 |    | 59993 |   |
| 12 | 59692 | 29 | 59789 |    | 59868 |    | 59928 |    | 59970 |    | 59994 |   |
| 13 | 59694 |    | 59791 |    | 59869 |    | 59929 |    | 59970 |    | 59994 |   |
| 14 | 59696 |    | 59792 |    | 59870 |    | 59930 |    | 59971 |    | 59994 |   |
| 15 | 59698 |    | 59793 |    | 59871 |    | 59930 |    | 59972 |    | 59994 |   |
| 16 | 59699 |    | 59795 |    | 59872 |    | 59931 |    | 59972 |    | 59995 |   |
| 17 | 59701 |    | 59796 |    | 59873 |    | 59932 |    | 59973 |    | 59995 |   |
| 18 | 59703 |    | 59798 |    | 59874 |    | 59933 |    | 59973 |    | 59995 | 3 |
| 19 | 59705 |    | 59799 |    | 59876 |    | 59934 |    | 59974 |    | 59995 |   |
| 20 | 59706 |    | 59801 |    | 59877 |    | 59935 |    | 59974 | 8  | 59995 |   |
| 21 | 59708 |    | 59802 |    | 59878 |    | 59935 |    | 59975 |    | 59996 |   |
| 22 | 59710 |    | 59803 |    | 59879 | 18 | 59936 | 13 | 59975 |    | 59996 |   |
| 23 | 59711 | 28 | 59805 | 23 | 59880 |    | 59937 |    | 59976 |    | 59996 |   |
| 24 | 59713 |    | 59806 |    | 59881 |    | 59938 |    | 59976 |    | 59996 |   |
| 25 | 59715 |    | 59808 |    | 59882 |    | 59939 |    | 59977 |    | 59996 |   |
| 26 | 59717 |    | 59809 |    | 59883 |    | 59939 |    | 59977 |    | 59997 |   |
| 27 | 59718 |    | 59810 |    | 59884 |    | 59940 |    | 59978 |    | 59997 |   |
| 28 | 59720 |    | 59812 |    | 59885 |    | 59941 |    | 59978 |    | 59997 |   |
| 29 | 59722 |    | 59813 |    | 59887 |    | 59941 |    | 59978 |    | 59997 |   |
| 30 | 59723 |    | 59815 |    | 59888 |    | 59942 |    | 59979 |    | 59997 |   |



# Sinus recti.

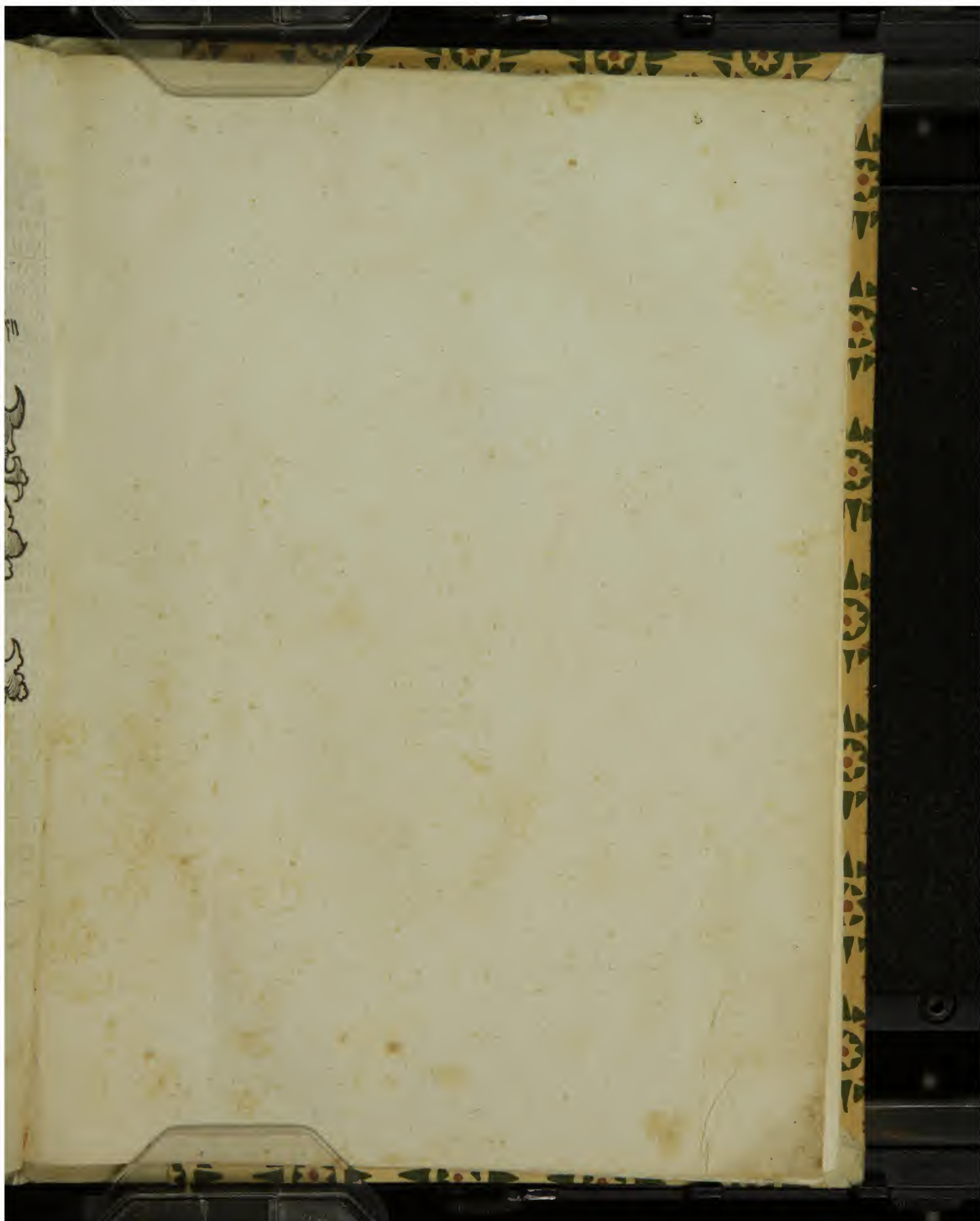
| 84       | 85       | 86       | 87       | 88       | 89    |
|----------|----------|----------|----------|----------|-------|
| ptes     | ptes     | ptes     | ptes     | ptes     | ptes  |
| 31 59725 | 59816    | 59889    | 59943    | 59979    | 59997 |
| 32 59727 | 59817    | 59890    | 59944    | 59980    | 59997 |
| 33 59728 | 59819    | 59891    | 59945    | 59980    | 59998 |
| 34 59730 | 59820    | 59892    | 59945    | 59981    | 59998 |
| 35 59732 | 27 59821 | 22 59893 | 59946    | 59981    | 59998 |
| 36 59733 | 59823    | 59894    | 59947    | 59982    | 59998 |
| 37 59735 | 59824    | 59895    | 59948    | 59982    | 59998 |
| 38 59736 | 59825    | 59896    | 59948    | 59982    | 59998 |
| 39 59738 | 59827    | 59897    | 59949    | 59983    | 59998 |
| 40 59740 | 59828    | 59898    | 59950    | 59983    | 59998 |
| 41 59741 | 59829    | 59899    | 59950    | 59984    | 59999 |
| 42 59743 | 59831    | 59900    | 59951    | 59984    | 59999 |
| 43 59744 | 59832    | 59901    | 59952    | 59984    | 59999 |
| 44 59746 | 59833    | 59902    | 59953    | 59985    | 59999 |
| 45 59748 | 59835    | 59903    | 59953    | 59985    | 59999 |
| 46 59749 | 59836    | 59904    | 59954    | 59986    | 59999 |
| 47 59751 | 59837    | 21 59905 | 16 59955 | 11 59986 | 59999 |
| 48 59753 | 26 59838 | 59906    | 59955    | 59986    | 59999 |
| 49 59754 | 59840    | 59907    | 59956    | 59987    | 59999 |
| 50 59756 | 59841    | 59908    | 59957    | 59987    | 59999 |
| 51 59757 | 59842    | 59909    | 59957    | 59987    | 59999 |
| 52 59759 | 59843    | 59910    | 59958    | 59988    | 59999 |
| 53 59760 | 59845    | 59911    | 59959    | 59988    | 59999 |
| 54 59762 | 59846    | 59912    | 59959    | 59988    | 59999 |
| 55 59764 | 59847    | 59913    | 59960    | 59989    | 59999 |
| 56 59765 | 59848    | 59914    | 59960    | 59989    | 59999 |
| 57 59767 | 59850    | 59915    | 59961    | 59989    | 59999 |
| 58 59769 | 59851    | 59915    | 59962    | 59990    | 59999 |
| 59 59770 | 59852    | 59916    | 59962    | 59990    | 60000 |
| 60 59771 | 59853    | 59917    | 59963    | 59990    | 60000 |

Finis

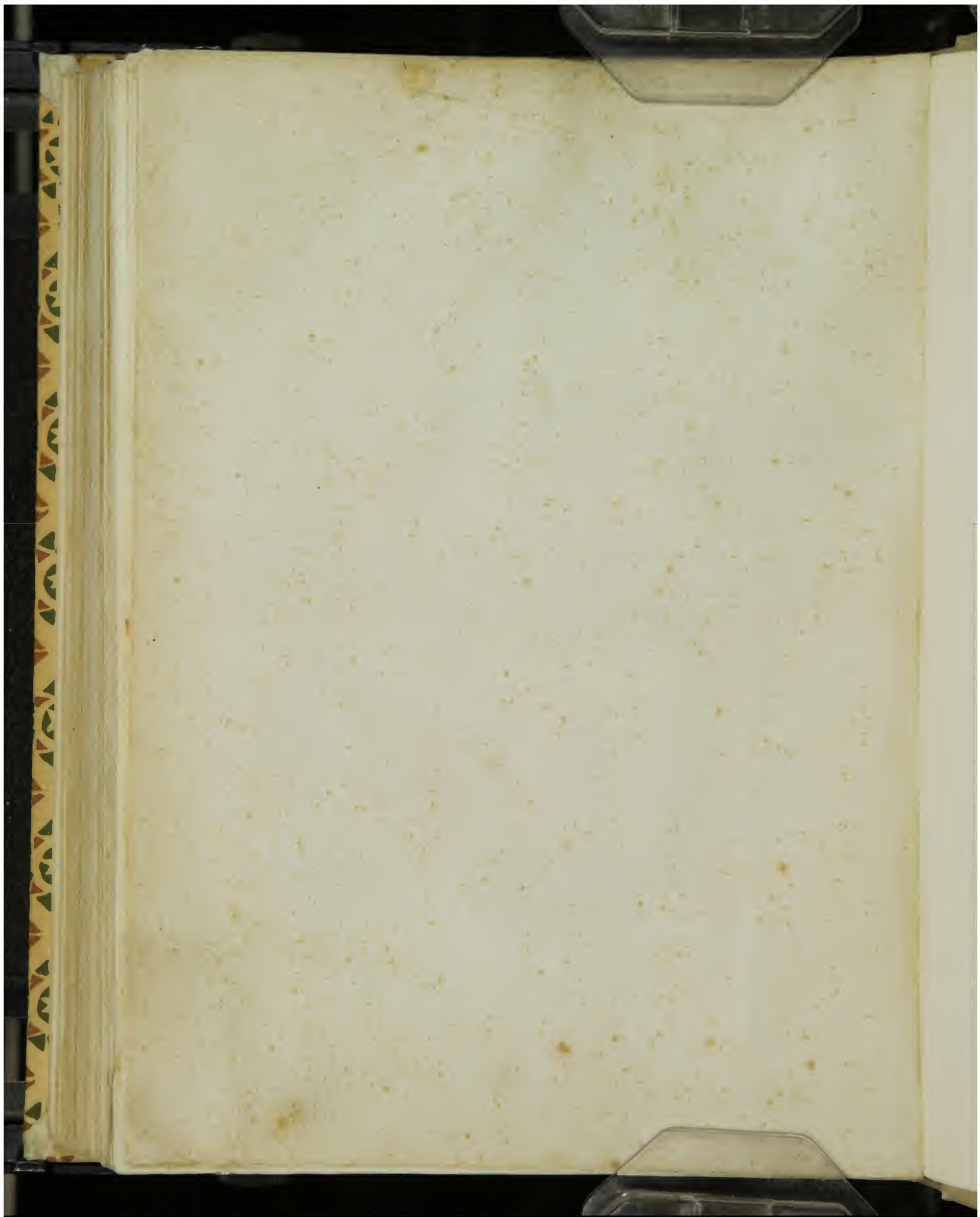




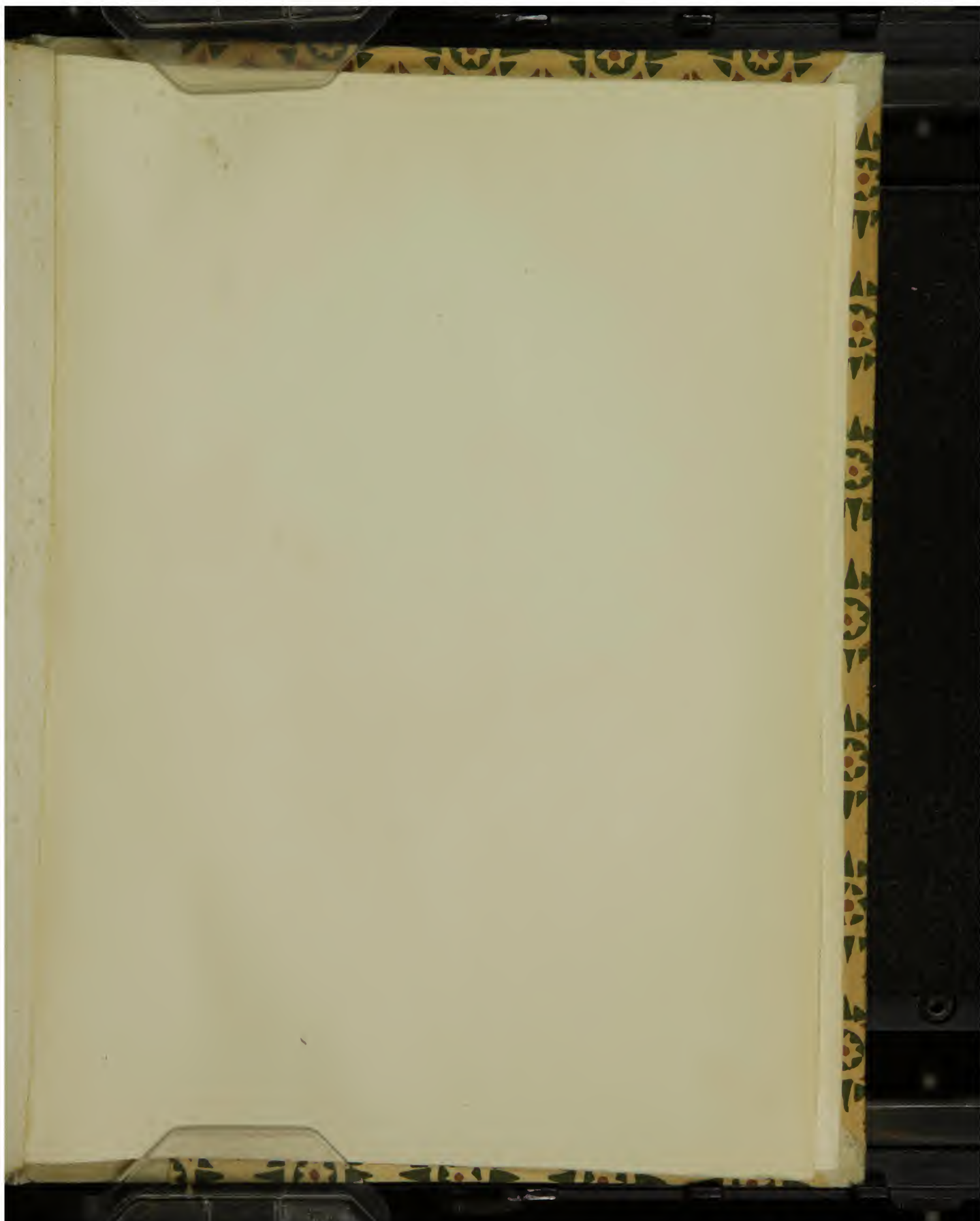




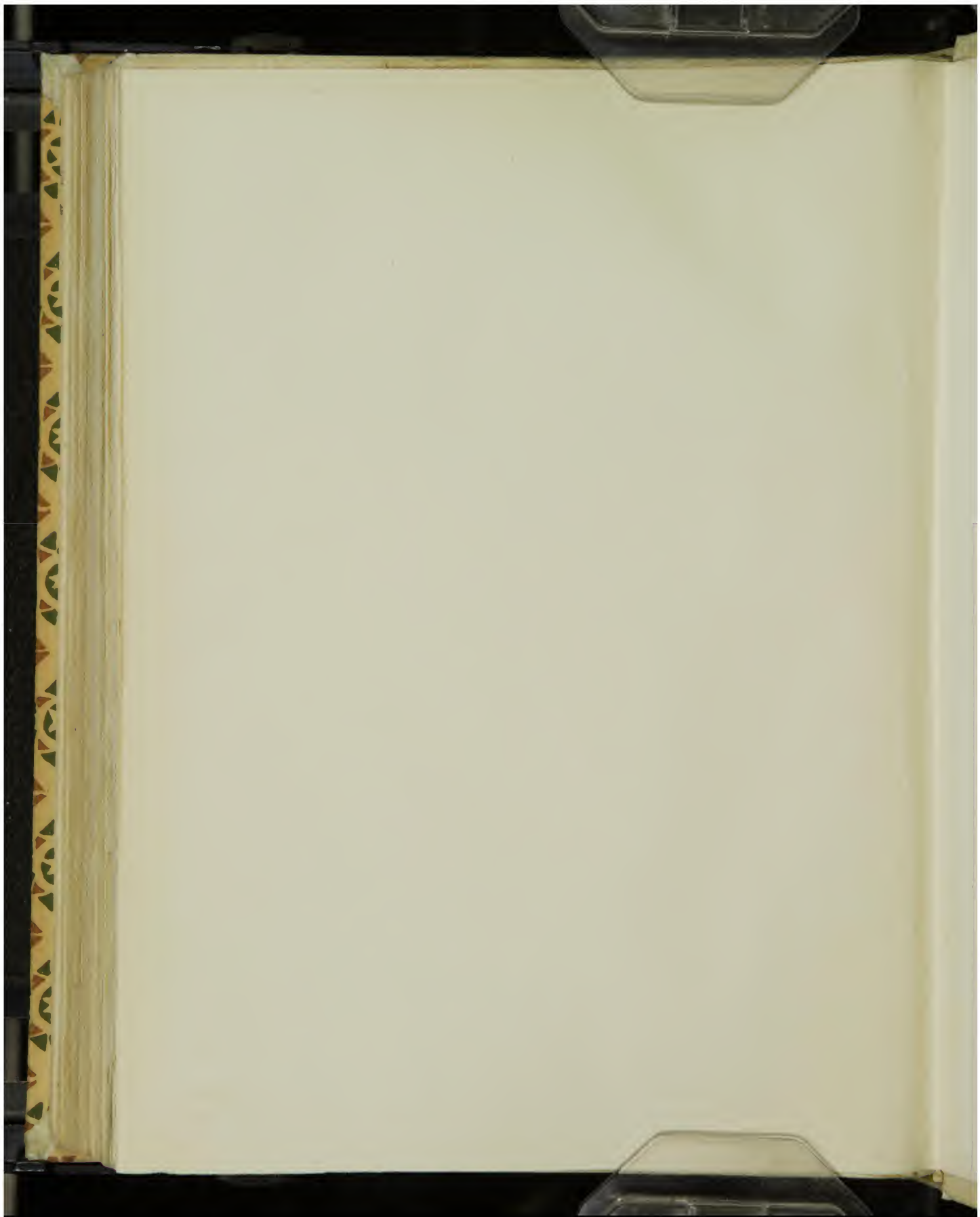














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